Supreme Court, U.S.
FILED

991553 MAR 2 1 2000

OFFICE OF THE CLERK

No. 99-

IN THE

Supreme Court of the United States

COMMONWEALTH OF PENNSYLVANIA,

Petitioner,

v.

GREGORY GINDLESPERGER,

Respondent.

ON PETITION FOR A WRIT OF CERTIORARI TO THE SUPREME COURT OF PENNSYLVANIA

PETITION FOR A WRIT OF CERTIORARI

CHRISTIAN A. FISANICK*
Special Assistant District Attorney
BRADLEY H. FOULK
District Attorney
GARRETT A. TAYLOR
Assistant District Attorney
Erie County, Pennsylvania
Pennsylvania District Attorneys Association
2929 North Front Street
Harrisburg, Pennsylvania 17110
(717) 238-5416

Counsel of Record

158269

Counsel Press LLC
(800) 274-3321 • (800) 359-6859

10 PP

QUESTION PRESENTED FOR REVIEW

Does law enforcement use of an infrared thermal imaging device, which detects heat waste given off by a private residence, constitute a search under the Fourth Amendment? The Pennsylvania Supreme Court says that it is a search, joining the analysis of courts in Washington, Montana, and California, while courts in Arizona, Wisconsin, and Kentucky, as well as the Fifth, Seventh, Eighth, Ninth, and Eleventh Circuits, have held that it is not a search and thus not subject to the Fourth Amendment.

TABLE OF CONTENTS

	Page
Question Presented for Review	i
Table of Contents	ii
Table of Cited Authorities	iv
Table of Appendices	x
Orders and Opinions Below	1
Statement of Jurisdiction	1
Constitutional and Statutory Provisions Involved	2
Statement of the Case	2
Reasons for Granting the Writ	6
I. Law Enforcement Use Of An Infrared Thermal Imaging Device Does Not Constitute A Search Under The Fourth Amendment Because A Person Has No Subjective Expectation Of Privacy To Heat Waste Emanating From A Residence. Even If There Is A Subjective Expectation Of Privacy, It Is Not One Which Society Is Willing To Recognize As Reasonable.	6

Contents

Page

II. Law Enforcement Use Of Thermal Imaging Is Akin To A Sniff By A Canine Which This Court Has Ruled Is Not A Search Since It Is Merely An Enhancement Of The Human Senses Through Non-intrusive Means. 13

III. This Court Has Ruled That Law Enforcement's Flying Over A Building And Making Observations Using Enhancement Equipment Does Not Constitute A Search. This Ruling Logically Extends To Law Enforcement's Detecting Heat Waste Emanating Into Public Airspace. 14

IV. Law Enforcement's Warrantless Detection Of Heat Waste Emanating From A Private Residence Is De Minimis And Reasonable Under The Fourth Amendment. 15

Conclusion 18

TABLE OF CITED AUTHORITIES

Page

Cases:

Air Pollution Variance Bd. of Colo. v. Western Alfalfa Corp., 416 U.S. 861 (1974) 9

California v. Ciraolo, 476 U.S. 207 (1986) 14, 17

Dow Chemical Co. v. United States, 476 U.S. 227 (1986) 15

Florida v. Riley, 488 U.S. 445 (1989) 11, 14, 15

Katz v. United States, 389 U.S. 347 (1967) 6, 8

Lafollette v. Commonwealth, 916 S.W.2d 747 (Ky. 1996) 5, 9

Lee v. United States, 343 U.S. 747 (1952) 14

Maryland v. Wilson, 519 U.S. 408 (1997) 15

Pennsylvania v. Mimms, 434 U.S. 106 (1977) 15

People v. Deutsch, 52 Cal. Rptr. 2d 366 (Cal. App. 1st Dist. 1996) 5, 9

Smith v. Maryland, 442 U.S. 735 (1979) 17

State v. McKee, 510 N.W.2d 807 (Wis. App. 1993) 5, 9

Cited Authorities

Page

State v. Siegal, 934 P.2d 176 (Mont. 1997) 5, 9

State v. Young, 867 P.2d 693 (Wash. 1994) 5, 9

Terry v. Ohio, 392 U.S. 1 (1968) 6

United States v. Cramer, 851 P.2d 147 (Ariz. App. 1992) 5, 9

United States v. Cusuamano, 67 F.3d 1497 (10th Cir. 1995), *vacated by* 83 F.3d 1247 (10th Cir. 1996) 10, 14

United States v. Ford, 34 F.3d 992 (11th Cir. 1994) 5, 13, 16

United States v. Ishmael, 48 F.3d 850 (5th Cir. 1995) 5, 9

United States v. Karo, 468 U.S. 705 (1984) 10, 11

United States v. Knotts, 460 U.S. 276 (1983) 17

United States v. Kyllo, 190 F.3d 1041 (9th Cir. 1999) 5, 9

United States v. Lee, 274 U.S. 559 (1927) 14

United States v. Myers, 46 F.3d 668 (7th Cir. 1995) 5, 8, 9, 13

Cited Authorities

Page

United States v. Pinson, 24 F.3d 1056 (8th Cir. 1994) 5, 8, 13, 16

United States v. Place, 462 U.S. 696 (1983) 5, 13

United States v. Robinson, 62 F.3d 1325 (11th Cir. 1995) 5, 9

United States v. Ventresca, 380 U.S. 102 (1965) .. 11, 12

Statutes:

28 U.S.C. § 1257(a) 2

United States Constitution:

Fourth Amendment ..... *passim*

Other Authorities:

Christopher Bannerman, *Forward Looking Infrared Radar and the Fourth Amendment*, 16 Q.L.R. 419 (1997) 7, 11

James Francis Barna, *Reforming the Katz Fourth Amendment "Reasonable Expectation of Privacy" Test: The Case of Infrared Surveillance of Homes*, 49 Wash. U.J. Urb. & Contemp. L. 247 (1996) 7

Cited Authorities

Page

Melinda Foster, *State v. Young: A Cool View Toward Infrared Thermal-Detection Devices*, 30 Gonz. L. Rev. 135 (1994) 7, 8

Lisa Tuenge Hale, *United States v. Ford: The Eleventh Circuit Permits Unrestricted Police Use of Thermal Surveillance on Private Property Without a Warrant*, 29 Ga. L. Rev. 819 (1995) 7

Todd M. Higey, *The Effect of Constitutional Hermeneutics on Whether Warrantless Thermal Imaging is an Impermissible Search under the Fourth Amendment*, 36 Duq. L. Rev. 415 (1998) 7, 12

Douglas A. Kash, *Prewarrant Thermal Imaging as a Fourth Amendment Violation: A Supreme Court Question in the Making*, 60 Alb. L. Rev. 1295 (1997) 7

George L. Kelley, *The Warrantless Use of Thermal Imagery*, 12 T.M. Cooley L. Rev. 597 (1995) .. 8

Mark J. Kwasowski, *Thermal Imaging Technology: Should its Warrantless Use by Police by Allowed in Residential Searches?*, 3 Tex. Wesleyan L. Rev. 393 (1997) 7

Cited Authorities

Page

Omar Ortega, *Thermal Imaging Devices: How the Government Privately Repealed the Fourth Amendment*, 46 Drake L. Rev. 173 (1997) 7

Lynne M. Pochurek, *From the Battlefront to the Homefront: Infrared Surveillance and the War on Drugs Place Privacy Under Siege*, 7 St. Thomas L. Rev. 137 (1994) 8

Daniel J. Polatsek, *Thermal Imaging and the Fourth Amendment: Pushing the Katz Test Towards Terminal Velocity*, 13 J. Marshall J. Computer & Info. L. 453 (1995) 8

Jeffrey J. Skelton, *Infrared Imaging Technology: Threatening to See Through the Fourth Amendment*, 29 Ind. L. Rev. 231 (1995) 7, 8

Tracy M. White, *The Heat is On: The Warrantless Use of Infrared Surveillance to Detect Indoor Marijuana Cultivation*, 27 Ariz. St. L.J. 295 (1995) 7

Mindy G. Wilson, *The Prewarrant Use of Thermal Imagery: Has this Technological Advance in the War Against Drugs Come at the Expense of Fourth Amendment Protections Against Unreasonable Searches?*, 83 Ky. L.J. 891 (1995) 8

Cited Authorities

Page

Matthew L. Zabel, *A High-Tech Assault on the "Castle": Warrantless Thermal Surveillance of Private Residences and the Fourth Amendment*, 90 Nw. U.L. Rev. 267 (1995) 8

TABLE OF APPENDICES

Page

Appendix A — Opinion Of The Supreme Court Of Pennsylvania Dated And Decided December 22, 1999 ..... 1a

Appendix B — Opinion Of The Superior Court Of Pennsylvania Dated And Filed December 24, 1997 ..... 24a

Appendix C — Opinion And Order Of The Court Of Common Pleas Of Erie County, Pennsylvania, Criminal Division Dated And Filed April 28, 1995 ..... 56a

ORDERS AND OPINIONS BELOW

The December 22, 1999 opinion of the Supreme Court of Pennsylvania is found at 1999 WL 1242606 and reproduced at App. 1a. The February 14, 1997 opinion of the Superior Court of Pennsylvania reversing the trial court is published at 706 A.2d 1216 and is reproduced at App. 24a. The April 28, 1995 trial court order is reproduced at App. 56a.

STATEMENT OF JURISDICTION

This is a state criminal prosecution in which the intermediate court of appeals in Pennsylvania — the Superior Court — upon appeal of Respondent, reversed the order of the trial court and suppressed the seizure of marijuana from Respondent's residence. *Commonwealth v. Gindlesperger*, 706 A.2d 1216 (Pa. Super. 1997). Petitioner, the Commonwealth of Pennsylvania, filed a discretionary appeal to the Supreme Court of Pennsylvania which was granted. The Supreme Court of Pennsylvania affirmed the order of the Superior Court on December 22, 1999. *Commonwealth v. Gindlesperger*, No. 40 W.D. Appeal Dkt. 1998, 1999 WL 1242606 (Pa. Dec. 22, 1999).

The Pennsylvania Supreme Court held that

> [L]aw enforcement's use of an infrared thermal imaging device to scan a private residence without obtaining a search warrant constitutes an unlawful search in violation of the Fourth Amendment to the Constitution. The Superior Court held that such use does constitute an unlawful search for purposes of the Fourth Amendment. We now affirm.

Id. at *1.

The decision of the Pennsylvania Supreme Court relied solely on Fourth Amendment grounds.[1]

This Court has jurisdiction to review the final judgment of the Pennsylvania Supreme Court based on its interpretation of the Fourth Amendment pursuant to 28 U.S.C. § 1257(a).

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

> The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

U.S. Const., amend. IV.

STATEMENT OF THE CASE

The Commonwealth of Pennsylvania seeks certiorari on an issue not previously addressed by this Court and which has engendered a split in the jurisdictions: Is the use of a thermal imaging device by police to detect heat waste coming from a residence a search subject to the strictures of the Fourth Amendment?

---

1. "However, given that the appeal before us was taken by the Commonwealth regarding the Superior Court's disposition, and given that we agree with the Superior Court, we too need not address [Respondent's] state constitutional challenge[.]" *Gindlesperger*, 1999 WL 1243606, at *2 n.3.

The Pennsylvania Supreme Court concisely summarized the undisputed facts in this case:

> On April 9, 1994, police officers entered the basement area of [Respondent's] residence pursuant to a search warrant and seized approximately 21 marijuana plants. Probable cause for the search was based, in part, on information provided by a confidential informant (CI) to Officer Gerald Pfadt, a five year veteran of the Erie County Mobile Drug Task Force. The CI told Officer Pfadt that he/she observed marijuana plants growing at Appellee's residence in February of 1994. Officer Pfadt asked the CI to confirm that marijuana was growing in Appellee's basement during the week of February 13, 1994, and the CI did so. In March of 1994, the CI told Officer Pfadt that Respondent was now using artificial lights to facilitate his marijuana growth operation.
>
> Further verification of this tip occurred when Captain Gregory Davis of the Pennsylvania Army National Guard Drug Force, along with local law enforcement, "viewed" Respondent's residence using a thermal imaging device known as a "WASP." This device is designed to distinguish appreciable and noticeable amounts of extraneous heat. Captain Davis detected "an unexplainable source of heat coming from the basement area that was not consistent with the location of the furnace or other known heat sources."
>
> A search warrant was issued for Respondent's home based, in part, on the fact that "[t]his heat

> source would be consistent with the heat source coming from the artificial lighting used in the growing of marijuana."
>
> . . . .
>
> [Respondent's] residence was then searched and police found artificial lighting equipment as well as marijuana plants in the basement. [Respondent] was arrested and charged with various violations of the Controlled Substance, Drug, Device, and Cosmetic Act. Thereafter, [Respondent] filed a pre-trial motion to suppress the evidence seized during the search of his residence, and the trial court denied the motion. A bench trial was conducted on May 30, 1995. [Respondent] was found guilty of all the charges against him.
>
> On appeal, the Superior Court reversed the trial court's order denying [Respondent's] suppression motion, holding that the warrantless use of the WASP device violated the Fourth Amendment and that law enforcement's use of the results of the scanning device to obtain a search warrant "was invalid and not a proper basis for issuance of the warrant." *Commonwealth v. Gindlesperger*, 706 A.2d 1216, 1218 (Pa. Super. 1997).

Gindlesperger, 1999 WL 1242606, at *1-*2.

The Pennsylvania Supreme Court then affirmed the Superior Court, rejecting Petitioner's argument that a person

has no expectation of privacy to the heat waste given off from a residence. Further, Pennsylvania's highest court held that use of a thermal imaging device was not analogous, as an extension of human senses, to a canine sniff which has been held by this Court not to be a search for Fourth Amendment purposes. *United States v. Place*, 462 U.S. 696 (1983). In doing so, the Pennsylvania Supreme Court aligned itself with the reasoning of courts in Washington,[2] Montana,[3] and California[4] which have held that a thermal imaging scan is a search. The court was unpersuaded by the reasoning of courts in Arizona,[5] Wisconsin,[6] and Kentucky,[7] as well as the Fifth,[8] Seventh,[9] Eighth,[10] Ninth,[11] and Eleventh[12] Circuits which have held that a such a scan is not a search.

---

2. *State v. Young*, 867 P.2d 693 (Wash. 1994).

3. Montana's Supreme Court has declared that the use of thermal imaging is a search under the state constitution. *State v. Siegal*, 934 P.2d 176 (Mont. 1997).

4. *People v. Deutsch*, 52 Cal. Rptr. 2d 366 (Cal. App. 1st Dist. 1996).

5. *United States v. Cramer*, 851 P.2d 147 (Ariz. App. 1992).

6. *State v. McKee*, 510 N.W.2d 807 (Wis. App. 1993).

7. *Lafollette v. Commonwealth*, 916 S.W.2d 747 (Ky. 1996).

8. *United States v. Ishmael*, 48 F.3d 850 (5th Cir. 1995) (at least insofar as the thermal imaging scan is done from "open fields").

9. *United States v. Myers*, 46 F.3d 668 (7th Cir. 1995).

10. *United States v. Pinson*, 24 F.3d 1056 (8th Cir. 1994).

11. *United States v. Kyllo*, 190 F.3d 1041 (9th Cir. 1999).

12. *United States v. Robinson*, 62 F.3d 1325 (11th Cir. 1995); *United States v. Ford*, 34 F.3d 992 (11th Cir. 1994).

REASONS FOR GRANTING THE WRIT

I.

LAW ENFORCEMENT USE OF AN INFRARED THERMAL IMAGING DEVICE DOES NOT CONSTITUTE A SEARCH UNDER THE FOURTH AMENDMENT BECAUSE A PERSON HAS NO SUBJECTIVE EXPECTATION OF PRIVACY TO HEAT WASTE EMANATING FROM A RESIDENCE. EVEN IF THERE IS A SUBJECTIVE EXPECTATION OF PRIVACY, IT IS NOT ONE WHICH SOCIETY IS WILLING TO RECOGNIZE AS REASONABLE.

It is well-established that the Fourth Amendment protects people, not places. A "search" for purposes of Fourth Amendment requires both an actual, subjective expectation of privacy and that the expectation of privacy is one that society recognizes as reasonable. *Katz v. United States*, 389 U.S. 347, 361 (1967) (Harlan, J., concurring), *adopted by a majority of the Court in Terry v. Ohio*, 392 U.S. 1, 9 (1968). Despite what the Pennsylvania Supreme Court believes, a person can hardly claim to have a subjective expectation of privacy to heat waste emanating from a residence detected by an infrared thermal imaging scan.[13]

---

13. The thermal imager can detect indoor marijuana growing operations because the lights used in such operations generate large amounts of heat. When used in the early morning or evening hours in the absence of sunlight, the passive, non-intrusive device shows man-made heat sources as different colors, with white representing intense heat and shades of gray or black representing cooler temperatures. However, it does not give temperature readings.

(Cont'd)

Even if a person subjectively believes that he has an expectation of privacy to his heat waste, the expectation is not one which society is willing to respect as reasonable. This Court should grant the Petition for Writ of Certiorari to examine this issue of first impression,[14] settle a serious split

---

(Cont'd)
Melinda Foster, *State v. Young: A Cool View Toward Infrared Thermal-Detection Devices*, 30 Gonz. L. Rev. 135, 135 (1994)) (citations omitted). "It has been used to locate individuals lost in a forest and to detect overloaded power lines, roof and steam pipe leaks, inefficient building insulation and forest fire lines through smoke." *Id.* at n.7 (citations omitted).

14. Since this Court has not yet ruled on the use of thermal imaging, there has been much scholarly writing on the topic. Todd M. Higey, *The Effect of Constitutional Hermeneutics on Whether Warrantless Thermal Imaging is an Impermissible Search under the Fourth Amendment*, 36 Duq. L. Rev. 415 (1998); Douglas A. Kash, *Prewarrant Thermal Imaging as a Fourth Amendment Violation: A Supreme Court Question in the Making*, 60 Alb. L. Rev. 1295 (1997); Christopher Bannerman, *Forward Looking Infrared Radar and the Fourth Amendment*, 16 Q.L.R. 419 (1997); Omar Ortega, *Thermal Imaging Devices: How the Government Privately Repealed the Fourth Amendment*, 46 Drake L. Rev. 173 (1997); Mark J. Kwasowski, *Thermal Imaging Technology: Should its Warrantless Use by Police by Allowed in Residential Searches?*, 3 Tex. Wesleyan L. Rev. 393 (1997); James Francis Barna, *Reforming the Katz Fourth Amendment "Reasonable Expectation of Privacy" Test: The Case of Infrared Surveillance of Homes*, 49 Wash. U.J. Urb. & Contemp. L. 247 (1996); Tracy M. White, *The Heat is On: The Warrantless Use of Infrared Surveillance to Detect Indoor Marijuana Cultivation*, 27 Ariz. St. L.J. 295 (1995); Lisa Tuenge Hale, *United States v. Ford: The Eleventh Circuit Permits Unrestricted Police Use of Thermal Surveillance on Private Property Without a Warrant*, 29 Ga. L. Rev. 819 (1995); Jeffrey J. Skelton, *Infrared Imaging Technology: Threatening to See Through*
(Cont'd)

in the jurisdictions, and repudiate the erroneous analysis of this Court's Fourth Amendment jurisprudence by Pennsylvania's highest court.

Five federal circuits and three state courts have ruled that thermal imaging is not a search. The analysis in each of these cases is persuasive under the *Katz* test.

The Eighth Circuit held that the defendant did not have a reasonable expectation of privacy in vented heat. This is especially so because thermal imaging is non-invasive to the premises. *Pinson*, 24 F.3d at 1058.

The Seventh Circuit followed along similar lines, finding that a defendant who intentionally vented heat from his residence has no subjective expectation of privacy, thus failing the first prong of the *Katz* test. *Myers*, 46 F.3d at 669. The court also noted that the defendant could not meet the second prong of *Katz* because heat emanating from indoor cultivation of marijuana was similar to trash left at the curb

---

(Cont'd)
the Fourth Amendment, 29 Ind. L. Rev. 231 (1995); Daniel J. Polatsek, *Thermal Imaging and the Fourth Amendment: Pushing the Katz Test Towards Terminal Velocity*, 13 J. Marshall J. Computer & Info. L. 453 (1995); Mindy G. Wilson, *The Prewarrant Use of Thermal Imagery: Has this Technological Advance in the War Against Drugs Come at the Expense of Fourth Amendment Protections Against Unreasonable Searches?*, 83 Ky. L.J. 891 (1995); Matthew L. Zabel, *A High-Tech Assault on the "Castle": Warrantless Thermal Surveillance of Private Residences and the Fourth Amendment*, 90 Nw. U.L. Rev. 267 (1995); George L. Kelley, *The Warrantless Use of Thermal Imagery*, 12 T.M. Cooley L. Rev. 597 (1995); Melinda Foster, *supra;* Lynne M. Pochurek, *From the Battlefront to the Homefront: Infrared Surveillance and the War on Drugs Place Privacy Under Siege*, 7 St. Thomas L. Rev. 137 (1994).

for collection, smoke pouring from a chimney,[15] and the odor of drugs coming from luggage. *Myers*, 46 F.3d at 670.

Where a defendant failed to take affirmative steps to prevent heat waste from his building had no legitimate expectation of privacy according to the Eleventh Circuit. The intentional venting of heat was not necessary to a finding of a lack of privacy. *Robinson*, 62 F.3d at 1331.

With a slightly different analysis, the Fifth Circuit found that thermal imaging required no warrant insofar as it was utilized from an open field. *Ishmael*, 48 F.3d at 857.

Recently, the Ninth Circuit held that a person has neither a subjective nor an objectively reasonable expectation of privacy to heat waste: "Whatever the 'Star Wars' capabilities this technology may possess in the abstract, the thermal imaging employed here intruded into nothing." *Kyllo*, 190 F.3d at 1046.

Three state jurisdictions — Arizona, Wisconsin, and Kentucky — have agreed with the varying rationales of these federal circuits. *See Cramer*, *supra*; *McKee*, *supra*; *Lafollette*, *supra*. But three other jurisdictions — Washington, Montana, and California — have disagreed. *See Young*, *supra*; *Siegal*, *supra*; *Deutsch*, *supra*.

The Pennsylvania Supreme Court, aligning itself with the minority, rested its decision on the principle that the thermal scanning device "also revealed critical information regarding the interior of the premises that could not have

---

15. *See Air Pollution Variance Bd. of Colo. v. Western Alfalfa Corp.*, 416 U.S. 861, 865 (1974).

otherwise been obtained without a warrant." *Gindlesperger*, 1999 WL 1242606, at *9. In support of this dubious proposition, the court relied *United States v. Karo*, 468 U.S. 705 (1984), which held that law enforcement monitoring of the location of a beeper within a private residence, "a location not open to visual surveillance," violated the Fourth Amendment. *Id.* at 714-15. Apparently the court believed that *Karo* was on point because law enforcement in this case, through use of the thermal scan, learned that the heat waste was coming from the basement, a place inside the residence.[16]

The Pennsylvania Supreme Court's analysis is faulty. First, the police in *Karo* affirmatively intruded into a protected zone of privacy by placing a beeper inside a can which eventually made its way into the residence. Here, law enforcement did nothing of the sort. They used the thermal scan from inside a vehicle on a public thoroughfare. This is not analogous to police surreptitiously entering the premises (sans warrant) via an electronic device. Second, the thermal imaging scan did not detect anything exclusively within the protected zone of privacy, such as the location of a beeper or person within the residence, what the occupants were doing, or what objects were present inside the residence. Unlike the police in *Karo*, who could determine at any time where the can with the beeper was located within the residence, police in this case only determined that heat waste was coming from inside the basement to the outside of the

---

16. The Pennsylvania Supreme Court did not elaborate on this point. It merely quoted the repudiated analysis of a Tenth Circuit case. *United States v. Cusuamano*, 67 F.3d 1497 (10th Cir. 1995), *vacated by* 83 F.3d 1247 (10th Cir. 1996) (not reaching issue because court found probable cause apart from thermal scan to support warrant).

residence.[17] That the residence had a basement is not private information: It is easily ascertainable from visual observation of the premises from a public vantage point. Further, measuring heat waste coming from a particular room in the residence is no different than "smelling," albeit with electronic enhancement,[18] the odor of marijuana coming through the cracks in a basement window or the burnt-powder smell of illegal fireworks being set off in a residence's curtilage. A person has no expectation of privacy to something placed within public purview, smell, or detection — voluntarily or involuntarily. *See, e.g., Florida v. Riley*, 488 U.S. 445 (1989) (plurality) (observation from helicopter flying in public airspace); *United States v. Ventresca*, 380 U.S. 102 (1965) (odor of fermenting mash near residence).[19]

---

17. Nor does this case represents the evils of law enforcement run amuck as mentioned in *Karo*: "Indiscriminate monitoring of property that has been withdrawn from public view would present far too serious a threat to privacy interests in the home to escape entirely some sort of Fourth Amendment oversight." *Karo*, 468 U.S. at 715-17.

18. The Pennsylvania Supreme Court's focus on the technically sophisticated nature of thermal imaging was misguided. Bannerman, *supra*, at 442 ("Too often the mere high-tech nature of FLIR [Forward Looking Infrared Radar] is given more attention in the Fourth Amendment analysis than it deserves, though 'time and time again the United States Supreme Court has held that police utilization of extra-sensory, non-intrusive equipment, such as FLIR, to investigate people and objects does not constitute a search for purposes of the Fourth Amendment.' ") (citation omitted).

19. The Pennsylvania Supreme Court attached significance to the fact that heat waste is not like garbage (abandoned property) which is voluntarily exposed to the public by the owner of the

(Cont'd)

In concluding that pre-warrant thermal imaging violates the Fourth Amendment, the Pennsylvania Supreme Court fell prey to the slippery slope fallacy. *See* Higey, *supra*, at 429 ("[A]dvancing technology will eventually reveal the most intimate details of a person's home; therefore, courts must check the advance of thermal imaging technology now.") The court noted:

> By focusing one's expectation of privacy in the "heat waste" that emanates form one's home rather than on the activities occurring within the home, it would have to be concluded that the use of a more sophisticated device capable of tracking the movements of persons within a structure and resolving the information gained form such heat waste into distinct images would be constitutionally proper since the focus would be entirely upon the expectation of privacy in the heat radiating from the home rather than on activities occurring within the home. This result demonstrates the danger of adopting such an analysis.

Gindlesperger, 1999 WL 1242606, at *6 n.7.

But no device of the sort imagined by the Pennsylvania Supreme Court was used here. Law enforcement did not sneak a peek into the private lives of the residents through use of Orwellian equipment. To the contrary, from a public

---

(Cont'd)
residence. *Gindlesperger*, 1999 WL 1242606, at *6-*7. It is safe to conclude, however, that the moonshiners in *Ventresca*, *supra*, did not "voluntarily" put the odor of mash into the air so that it could be smelled by authorities. The analytical choice of "voluntary" vs. "involuntary" concerning heat waste is specious.

vantage point they simply detected something that no United States resident could possibly expect is private — heat coming off of a building. The Pennsylvania Supreme Court's rationale is not only misguided under the Fourth Amendment jurisprudence of this Court but belies common sense. It cannot stand.

II.

LAW ENFORCEMENT USE OF THERMAL IMAGING IS AKIN TO A SNIFF BY A CANINE WHICH THIS COURT HAS RULED IS NOT A SEARCH SINCE IT IS MERELY AN ENHANCEMENT OF THE HUMAN SENSES THROUGH NON-INTRUSIVE MEANS.

This Court has ruled that a sniff by a drug-detecting canine of the odor of drugs emanating into the public air is not a search under the Fourth Amendment. *United States v. Place*, *supra*. Reasoning by analogy, several courts have used this principle to uphold the use of thermal imaging as nothing more than an enhancement of the human senses to detect something emanating into public air. *See, e.g.*, *United States v. Myers*, *supra*; *United States v. Ford*, *supra*; *United States v. Pinson*, *supra*. The Pennsylvania Supreme Court rejected this line of thinking by simply finding, "[T]he thermal imaging device, unlike the trained dog, does not have the ability to distinguish between legal and illegal activities occurring within the home based on the amount of extraneous heat detected." *Gindlesperger*, 1999 WL 1242606 at *8.

This distinction is nonsense. The Fourth Amendment does not require a "crime-sensitive" device in order for law enforcement activity to be considered constitutional. The Pennsylvania Supreme Court's analysis breaks down in one

simple hypothetical: Using the Pennsylvania Supreme Court's reasoning, police would be forbidden to stand in a public area and use binoculars or a flashlight to observe something through the open blinds of a residence window since neither binoculars nor flashlight can discriminate criminal activity from non-criminal activity.[20] Clearly, police may use such devices under the Fourth Amendment without concern about their crime-detecting sensitivity. *See, e.g.*, *Lee v. United States*, 343 U.S. 747 (1952) (bifocals, field glasses, or telescope); *United States v. Lee*, 274 U.S. 559 (1927) (flashlight).

III.

THIS COURT HAS RULED THAT LAW ENFORCEMENT'S FLYING OVER A BUILDING AND MAKING OBSERVATIONS USING ENHANCEMENT EQUIPMENT DOES NOT CONSTITUTE A SEARCH. THIS RULING LOGICALLY EXTENDS TO LAW ENFORCEMENT'S DETECTING HEAT WASTE EMANATING INTO PUBLIC AIRSPACE.

In *California v. Ciraolo*, 476 U.S. 207 (1986), this Court found that law enforcement observations of a home and its curtilage from public airspace done with the naked eye did not infringe on the Fourth Amendment. "[W]hat a person knowingly exposes to the public, even in his own home or office, is not subject of Fourth Amendment protection." *Id.* at 213 (citation to *Katz* omitted). *See also Florida v. Riley*,

---

20. Even the case relied upon by the Pennsylvania Supreme Court, *Cusuamano*, does not adopt this distinction: "*Katz* looked not to the tools employed by the government nor to the phenomena measured by those tools but to the object of the governments efforts[.]" *Cusuamano*, 67 F.3d at 1501.

supra. Further, in *Dow Chemical Co. v. United States*, 476 U.S. 227 (1986), this Court found that aerial photography using equipment[21] that enhanced vision was not a search either. However, the majority cautioned that one day "surveillance of private property by using highly sophisticated surveillance equipment not generally available to the public, such as satellite technology, might be constitutionally proscribed absent a warrant." *Id.* at 237.

This case presents the next step in development of the law — the use a more sophisticated sensory enhancing device — but not a step too close to the cautionary language of *Dow*. Infrared thermal imaging is a proper law enforcement tool under the Fourth Amendment.

IV.

LAW ENFORCEMENT'S WARRANTLESS DETECTION OF HEAT WASTE EMANATING FROM A PRIVATE RESIDENCE IS DE MINIMIS AND REASONABLE UNDER THE FOURTH AMENDMENT.

This Court has held that not all intrusions, even suspicionless ones, by law enforcement significantly infringe on a person's constitutional freedoms. *See, e.g.*, *Pennsylvania v. Mimms*, 434 U.S. 106 (1977) (ordering driver out of vehicle de minimis when balanced against police officer safety); *Maryland v. Wilson*, 519 U.S. 408 (1997) (same result for passengers). Infrared thermal imaging gives law enforcement authorities only minimal information regarding the inside of a structure. The low resolution of the scan reveals little if

---

21. The equipment used was a commercial mapping camera that cost $22,000. *Dow*, 446 U.S. at 243 (citation omitted).

any intimate detail of activity protected by the Fourth Amendment. *Ford*, 34 F.3d at 996-97; *Pinson*, 24 F.3d at 1059. It cannot be considered as having anything more than de minimis impact on the Fourth Amendment.

The polestar of the Fourth Amendment's "reasonableness clause," is simply a balancing test of what society is prepared to accept as reasonable by law enforcement against the protections of the Fourth Amendment. Therefore, the question becomes this: Is the non-intrusive use of a detection device in public airspace *reasonable* even if the device may alert authorities in a small, indistinct way about the contents of the residence, *e.g.*, that there is something inside generating heat waste? As Judge Brosky so aptly put it in his Pennsylvania Superior Court dissent:

> The Fourth Amendment to the United States Constitution protects the citizens of the United States from unreasonable searches and seizures. By implication then, citizens are not free from government intrusion of all kinds, merely, unreasonable intrusion. If there were Paradise on earth, a kind of Nirvana, there would be no government intrusion of any kind. Indeed, in such a world there may not be a need for government at all. On the earth we know governments exist to provide for the people of the land. Laws exist in an effort to protect the innocent from those who would do evil. Thus, there is a need for law enforcement authorities and law enforcement activities.
>
> . . . .

> Technological advances are creating difficult questions regarding surveillance of criminal suspects. Electronic eavesdropping is possible and now, particularly if some of Hollywood's movie offering are representative, it is possible to "see" through walls in various ways to determine what a building's occupants are doing inside. Nevertheless, in my opinion, the conducting of the thermal detection test in the present case did not constitute a significant intrusion of [Respondent's] privacy. The test was conducted from outside the residence, it did not disturb [Respondent's] peace in any way and it revealed only minimal and generalized information which, by itself, was not of a sensitive nature. In my opinion, the minimal invasion the test constitutes is outweighed by the public interest in effective law enforcement.

Gindlesperger, 706 A.2d at 1127-28 (Brosky, J., dissenting). *See also Ciraolo*, 476 U.S. at 214-25 (non-physically intrusive search does not violate society's expectation of privacy). *Cf. United States v. Knotts*, 460 U.S. 276 (1983) (beeper to monitor defendant's movements in public places constitutionally acceptable); *Smith v. Maryland*, 442 U.S. 735 (1979) (non-intrusive pen register and no reasonable expectation of privacy; same result).

This reasoning properly balances Twenty-first Century technological marvels and the freedom that the drafters of the Fourth Amendment so cherished. The minimal intrusion into one's privacy by an infrared thermal imaging scan does not offend the Constitution.

CONCLUSION

For these reasons, this Petition for Writ of Certiorari to the Supreme Court of Pennsylvania should be granted.

Respectfully submitted,

CHRISTIAN A. FISANICK*
Special Assistant District Attorney
BRADLEY H. FOULK
District Attorney
GARRETT A. TAYLOR
Assistant District Attorney
Erie County, Pennsylvania
Pennsylvania District Attorneys Association
2929 North Front Street
Harrisburg, Pennsylvania 17110
(717) 238-5416

**Counsel of Record*

APPENDIX

APPENDIX A — OPINION OF THE SUPREME COURT OF PENNSYLVANIA DATED AND DECIDED DECEMBER 22, 1999

COMMONWEALTH of Pennsylvania,

Appellant,

v.

Gregory GINDLESPERGER,

Appellee.

No. 40 W.D. Appeal Docket 1998

Supreme Court of Pennsylvania.

Argued March 9, 1999.

Decided Dec. 22, 1999.

Appeal from the Order of Superior Court at No. 85PGH97 entered 12/24/97 vacating the Judgment of Sentence and Motion to Suppress is reversed from the Judgment of the Court of Common Pleas of Erie County, Criminal Division at No. 1515 of 1994 entered 2/14/96. 706 A.2d 1216 (Pa.Super.1997)

OPINION

ZAPPALA Justice.

This appeal presents the first impression question of whether law enforcement agents' use of an infrared thermal

imaging device to scan a private residence without obtaining a search warrant constitutes an unlawful search in violation of the Fourth Amendment to the United States Constitution. The Superior Court held that such use does constitute an unlawful search for purposes of the Fourth Amendment. We now affirm.

On April 9, 1994, police officers entered the basement area of Appellee Gregory Gindlesperger's residence pursuant to a search warrant and seized approximately 21 marijuana plants. Probable cause for the search was based, in part, on information provided by a confidential informant (CI) to Officer Gerald Pfadt, a five year veteran of the Erie County Mobile Drug Task Force. The CI told Officer Pfadt that he/she observed marijuana plants growing at Appellee's residence in February of 1994. Officer Pfadt asked the CI to confirm that marijuana was growing in Appellee's basement during the week of February 13, 1994 and the CI did so. In March of 1994, the CI told Officer Pfadt that Appellee was now using artificial lights to facilitate his marijuana growth operation.

Further verification of this tip occurred when Captain Gregory Davis of the Pennsylvania Army National Guard Drug Force, along with local law enforcement, "viewed" Respondent's residence using a thermal imaging device known as a "WASP." Search Warrant and Affidavit of Probable Cause, R. 546a, Paragraph 5. This device is designed to distinguish appreciable and noticeable amounts of extraneous heat. Id. Captain Davis detected "an unexplainable source of heat coming from the basement area

that was not consistent with the location of the furnace or other know heat sources." Id.[1]

A search warrant was issued for Respondent's home based, in part, on the fact that "[t]his heat source would be consistent with the heat source coming from the artificial lighting used in the growing of marijuana." Id. Officer Pfadt further averred the following in the affidavit of probable cause in support of the search warrant:

> [I]ndividuals who grow marijuana in an indoor setting do so in a continuing operation and have plants in various stages of growth so as to be able to have a continuous supply of marijuana to be harvested.
>
> * * *
>
> [T]he CI has provided information to this officer in the past that has been proven reliable and will result in the arrests of individuals for violations of the drug laws.

Id.

Appellee's residence was then searched and police found artificial lighting equipment as well as marijuana plants in the basement. Appellee was arrested and charged with

---

1. Captain Davis also checked five residences of similar structure and design on either side of Appellee's home and detected no such heat pattern.

various violations of the Controlled Substance, Drug, Device and Cosmetic Act. Thereafter, Appellee filed a pre-trial motion to suppress the evidence seized during the search of his residence and the trial court denied the motion. A bench trial was conducted on May 30, 1995. Appellee was found guilty of all the charges against him.

On appeal, the Superior Court reversed the trial court's order denying Appellee's suppression motion, holding that the warrantless use of the WASP device violated the Fourth Amendment and that law enforcement's use of the results of the scanning device to obtain a search warrant "was invalid and not a proper basis for issuance of the warrant." Commonwealth v. Gindlesperger, 706 A.2d 1216, 1218 (Pa.Super.1997).[2]

The Commonwealth maintains that the Superior Court erred in concluding that the warrantless use of the WASP device to scan Appellee's residence constituted a search pursuant to the Fourth Amendment.[3]

---

2. The court went on to conclude that the balance of the information provided to the magistrate in the Affidavit of Probable Cause, namely Officer Pfadt's averments regarding the CI and the information which the CI supplied to him, was insufficient to sustain the issuance of the warrant. The propriety of this determination was not raised on appeal and is not before us.

3. We note that Appellee also asserted a state constitutional challenge to law enforcement's warrantless use of the WASP device to scan his residence before the Superior Court. However, given that the court concluded such use violated the Fourth Amendment, it did not address Appellee's Article 1, Section 8 claim. (Cont'd)

Appendix A

Initially, we note that the Fourth Amendment protects "the right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures." U.S. Const. amend. IV. This fundamental right is preserved by a requirement that searches be conducted pursuant to a warrant issued by an independent judicial officer based upon probable cause. California v. Carney, 471 U.S. 386, 105 S.Ct. 2066, 85 L.Ed.2d 406 (1985). The test for establishing what constitutes a search for purposes of the Fourth Amendment was established by the Court in Katz v. United States, 389 U.S. 347, 361, 88 S.Ct. 507, 19 L.Ed.2d 576 (1967) (Harlan, J., concurring), requiring that one asserting that an unlawful search has occurred demonstrate, first, an actual, subjective expectation of privacy in that which is searched and second, that this expectation is one our society recognizes to be reasonable. Here, the Commonwealth maintains that the facts of the instant case fail to meet the test articulated by the United States Supreme Court in Katz and, thus, fail to

---

(Cont'd)

Gindlesperger, 706 A.2d at 1224. Appellee, likewise, preserves his state constitutional claim in his brief to this Court. However, given that the appeal before us was taken by the Commonwealth regarding the Superior Court's disposition, and given that we agree with the Superior Court, we too need not address Appellee's state constitutional challenge since this Court has held that embodied in Article 1, Section 8 is a strong notion of privacy which is greater than that of the Fourth Amendment. See Commonwealth v. Edmunds, 526 Pa. 374, 586 A.2d 887, 897-898 ("Article 1, Section 8 may be employed to guard individual privacy rights against unreasonable searches and seizures more zealously than the federal government . . ."). Thus, given our conclusion that the within conduct violates the Fourth Amendment, it is clear that this conduct likewise violates Article 1, Section 8.

establish that an improper search, requiring a warrant based upon probable cause, occurred. We disagree.

The defendant in Katz was convicted of violating a federal statute prohibiting the interstate transmission of wagering information by telephone. To obtain evidence against Katz, FBI agents attached an electronic listening and recording device to the outside of the public telephone booth from which Katz placed his calls. Katz objected to the use of this evidence at trial contending that it had been illegally obtained in violation of the Fourth Amendment. The Court agreed, holding the government's warrantless use of the electronic listening and recording device to be unconstitutional.

The Court rejected the government's assertion that because the surveillance technique it employed did not involve a physical penetration of the phone booth, the Fourth Amendment was not implicated. The Court concluded that such activity by government agents

> violated the privacy upon which [the defendant] justifiably relied while using the telephone booth and thus constituted a 'search and seizure' within the meaning of the Fourth Amendment. The fact that the electronic device employed to achieve that end did not happen to penetrate the wall of the booth can have no constitutional significance.

Id. at 353.[4]

---

4. As noted, Justice Harlan, in his concurring opinion, formulated the above stated test for determining whether a particular search violates the Fourth Amendment. His two prong formulation was formally adopted by the Court in Smith v. Maryland, 442 U.S. 735, 99 S.Ct. 2577, 61 L.Ed.2d 220 (1979).

Appendix A

While the United States Supreme Court has not yet ruled on the validity of law enforcement's warrantless use of a thermal imaging device to scan a private residence as occurred in this case, a number of federal circuit courts, district courts and state courts have done so. There is a split among the authorities that have examined the issue. The Seventh, Eighth, Ninth and Eleventh Circuits have upheld the use of thermal imaging devices by law enforcement officials to scan private residences.[5] United States v. Myers, 46 F.3d 668 (7th Cir.1995); United States v. Pinson, 24 F.3d 1056 (8th Cir.1994); United States v. Kyllo, 1999 U.S.App. Lexis 21562 (9th Cir. filed September 9, 1999). United States v. Ford, 34 F.3d 992 (11th Cir.1994). One district court in the Ninth Circuit has also upheld the warrantless use of these devices. United States v. Penny-Feeney, 773 F.Supp. 220 (D.Hawai'i 1991), affirmed on other grounds, 984 F.2d 1053 (9th Cir.1993).

A panel of the Tenth Circuit in United States v. Cusumano, 67 F.3d 1497 (10th Cir.1995), found that the warrantless use of a thermal imager violated the Fourth Amendment. However, that decision was vacated by an en banc court and the case was decided without reaching the constitutional issue. One district court in the Seventh Circuit found such warrantless use to be unconstitutional as did the State Supreme Courts of Montana and Washington and the Court of Appeal of California. United States v. Field, 855 F.Supp. 1518 (W.D.Wisc.1994); State v. Siegal, 281 Mont. 250, 934 P.2d 176 (Mont.1997); State v. Young, 123 Wash.2d 173,

5. The Fifth Circuit has permitted the use of such a device in an open field. See United States v. Ishmael, 48 F.3d 850 (5th Cir.1995).

867 P.2d 593 (Wash.1994); People v. Deutsch, 44 Cal.App.4th 1224, 52 Cal.Rptr.2d 366 (Cal.App.1st Dist.1996).

The Commonwealth relies on those cases that have upheld the use of thermal imaging devices based upon the conclusion that one does not have a subjective expectation of privacy in the "heat waste" that emanates from one's residence. In so concluding, these courts have essentially analogized this so called "heat waste" to discarded trash and/or the odor that can be detected by drug sniffing dogs. The Supreme Court has upheld the warrantless search of discarded trash in California v. Greenwood, 486 U.S. 35, 108 S.Ct. 1625, 100 L.Ed.2d 30 (1988), and the warrantless use of drug sniffing dogs in United States v. Place, 462 U.S. 696, 103 S.Ct. 2637, 77 L.Ed.2d 110 (1983). See Ford, 34 F.3d at 997 ("[t]he heat that Ford intentionally vented from his mobile home was a waste byproduct of his marijuana cultivation and is analogous to the inculpatory items that the respondents in Greenwood discarded in their trash. . . ."); Pinson, 24 F.3d at 1058 ("[j]ust as odor escapes a compartment or building and is detected by the sense-enhancing instrument of a canine sniff, so also does heat escape a home and is detected by the sense-enhancing infrared camera").

In upholding the use of such devices, courts adopting the heat waste theory have relied upon the fact that the thermal imager is a passive device, employed from beyond the curtilage, which emits no rays or beams and which does not intrude in any fashion upon the interior of the observed property. Courts have also found significant the fact that the resolution of such a device is limited and, generally, detects

only hot spots on the exterior surfaces of a building. The Eleventh Circuit observed that "the thermal imagery at issue here appears to be of such low resolution as to render it incapable of revealing the intimacy of detail and activity protected by the Fourth Amendment." Ford, 34 F.3d at 996. The Pinson court observed: "The detection of the heat waste was not an intrusion into the home; no intimate details of the home were observed, and there was no intrusion upon the privacy of the individuals within." Pinson, 24 F.3d at 1059. Likewise, the Ninth Circuit in Kyllo stated: "The scan merely indicated amorphous 'hot spots' on the roof and exterior wall and not the detailed images of private activity that Kyllo suggests the technology could expose." Kyllo, 1999 U.S.App. Lexis 21562 at 15.

Courts that have rejected the heat waste theory and found the use of thermal imaging devices to be constitutionally repugnant have done so based upon the conclusion that these devices do, in fact, reveal intimate details regarding activities occurring within the sanctity of the home, the place deserving the utmost protection pursuant to the Fourth Amendment. See Payton v. New York, 445 U.S. 573, 100 S.Ct. 1371, 63 L.Ed.2d 639 (1980) (searches and seizures in public places are treated differently than searches and seizures occurring in the home); Silverman v. United States, 365 U.S. 505, 511, 81 S.Ct. 679, 5 L.Ed.2d 734 (1961) ("the right of a man to retreat into his own home and there be free from unreasonable governmental intrusion stands at the 'very core' of the Fourth Amendment").

Specifically, in Field, the district court found unpersuasive the government's argument that thermal

imaging devices are merely passive and incapable of penetrating walls. The court stated:

> Whether a device is passive is irrelevant; what is relevant is what the device records. As for not seeing through walls, the imager records the heat escaping from the walls that is emitted by an object on the other side of the wall. To the extent the device can pick up such radiation and record it, it can "see through" walls. In this case, for instance, the imager recorded the thermal energy emitted by a dehumidifier inside a closet within defendant's residence. The imager did not reveal that the heat emitting source was a dehumidifier, but it did reveal facts about activities within the house: the fact of the heat emission and its general location.

Field, 855 F.Supp. at 1519. Likewise, the Tenth Circuit in Cusumano expressed the same concerns regarding the thermal imager's use and pointed out that the proper inquiry should focus not on whether one has a subjective expectation of privacy in the heat escaping from their home, but rather, on whether one has exhibited a subjective expectation of privacy in the activities occurring within the home.[6] The court stated:

---

6. While we recognize that the court's decision in Cusumano was eventually vacated and the matter was decided on non-constitutional grounds — the court found that there was sufficient, independent information in the affidavit of probable cause to support the issuance of a warrant — the court's analysis is, nevertheless, useful to our disposition since the court thoroughly analyzed the issue that is properly before us and we find the analysis employed by the court to be persuasive.

Appendix A

To focus upon the "waste heat" radiating from a structure is to ignore both the purpose of the device and the manner in which it operates. The imager measures not "waste heat" but rather heat differentials; it records heat gradients across the exterior surface of a building. The laws of thermodynamics inform us that the amount of heat radiated from a given section of the exterior wall is directly related to the amount of heat generated by heat sources in proximity to the interior of that wall. Activities that generate a significant amount of heat therefore produce a heat "signature" that the imager can detect. Under optimal conditions — viewing through an open window into a darkened room, for example — the imager (or one much like it) might well be able to resolve these heat signatures into somewhat indistinct images. See, e.g., Young, 867 P.2d at 595 (noting that an imager can discern a human form through a curtained window under certain circumstances). More typically, the machine identifies only hot spots on a wall (as was true in this case). In either instance, it is the existence of these distinct interior sources that the device indirectly recognizes — with greater or lesser imprecision varying with the insulating attributes of the exterior walls — and records. While the heat lost by a building is data of some limited value, the true worth of the device — the very reason that the government turned the imager on the home of the Defendants — is predicated upon the translation of these thermal records into

> intelligible (albeit speculative) information about the activities that generate the observed heat. The utility of the machine depends therefore not on the inevitable and ubiquitous phenomenon of heat loss but on the presence of distinguishable heat signatures inside the structure. We see no reason to blind ourselves to the physical reality of this relationship by severing our analysis of the heat differentials emanating through the walls of a structure from an informed consideration of the heat sources within that structure.

Cusumano, 67 F.3d at 1501 (footnotes omitted) (emphasis added).

The court concluded that the foregoing analysis flowed naturally from the Supreme Court's analysis in Katz noting that when

> Reduced to its operational fundamentals, [the bug employed by law enforcement] did not monitor the interior of the phone booth at all; rather, it measured the molecular vibrations of the glass that encompassed that interior. Alternatively, it might fairly be said that the bug passively recorded the propagation of waste vibrational energy into the public sphere. Drawing upon the logic embraced by our fellow circuits, one could reason that the translation of the vibrational record into an account of that which transpired within the phone booth was simply a useful interpretation of abandoned energy — an analysis which would,

> we note, approve the search condemned by Katz. The Supreme Court in Katz did not dwell upon these physical minutiae, but, rather, recognized that the Fourth Amendment broadly protects from government intrusion that which a person reasonably seeks to keep private.

Id.

As noted earlier, the Court in Katz specifically rejected the government's argument that because the surveillance technique utilized by law enforcement did not involve a physical penetration of the structure at issue, the Fourth Amendment was not implicated noting that "the reach of [the] Amendment cannot turn upon the presence or absence of a physical intrusion into any given enclosure." Katz, 389 U.S. at 353.

As did the Cusumano court, we too hold that the proper focus of our inquiry should be on whether Appellee was able to demonstrate a legitimate expectation of privacy in the heat-generating activities occurring within his home.[7] In so

---

7. By focusing on one's expectation of privacy in the "heat waste" that emanates from one's home, rather than on the activities occurring within the home, it would have to be concluded that the use of a more sophisticated device capable of tracking the movements of persons within a structure and resolving the information gained from such heat waste into distinct images would be constitutionally proper since the focus would be entirely upon the expectation of privacy in the heat radiating from the home rather than on the activities occurring within the home. This result demonstrates the danger of adopting such an analysis.

concluding, we reject the argument that the government's use of the thermal imager to scan Appellee's residence was no different, for purposes of Fourth Amendment analysis, than cases where law enforcement have gone through discarded trash or used trained drug dogs to detect contraband.

In California v. Greenwood, the Supreme Court upheld the warrantless search and seizure of discarded garbage left for collection outside the curtilage of Respondent Greenwood's home. Specifically, the Court concluded that Greenwood failed to demonstrate a subjective expectation of privacy in his discarded trash which society is prepared to accept as reasonable. In reaching this conclusion, the Court focused on the voluntary nature of Greenwood's relinquishment of his trash into the hands of third parties. The Court found further justification for this conclusion by noting the frequency with which people or animals rummage through curbside garbage bags. The Court noted:

> Here, we conclude that respondents exposed their garbage to the public sufficiently to defeat their claim to Fourth Amendment protection. It is common knowledge that plastic garbage bags left on or at the side of a public street are readily accessible to animals, children, scavengers, snoops and other member of the public. Moreover, respondents placed their refuse at the curb for the express purpose of conveying it to a third party, the trash collector, who might himself have sorted through respondents' trash or permitted others, such as the police, to do so. Accordingly, having

> deposited their garbage "in an area particularly suited for public consumption, for the express purpose of having strangers take it," respondents could have no reasonable expectation of privacy in the inculpatory items that they discarded.

Greenwood, 486 U.S. at 40-41 (citations and footnotes omitted).

Clearly there is a significant difference between heat which escapes from one's home and garbage which is voluntarily placed at the curb for collection. We find the Supreme Court of Washington's summary of these differences to be persuasive. The court observed:

> First, it is difficult to say one voluntarily vents heat waste in the same way that one disposes of garbage. Heat, unlike garbage, automatically leaves a person's home without any deliberate participation by the homeowner. Even if some heat is vented to the outside, as in Peeny-Feeney [Penny-Feeney], the device detects all heat leaving the home, not just the heat directed out through the vent. Moreover, the Greenwood court relied in part on the notion that when one places garbage out at the curb, one assumes the foreseeable risk of other people, children, or animals discovering and seizing what is in the garbage can. However, it is difficult to say one should expect other people to use sophisticated infrared instruments on one's home to view so-called heat waste. The Greenwood court also

> noted one can avoid the risk by not placing private information in the garbage. On the other hand, the only way for a person to avoid the risk of exposure in this case . . . would be to turn off all heat sources in the home, even in subzero temperatures.

Washington v. Young, 867 P.2d at 602-3. Likewise, the Supreme Court of Montana criticized this approach, noting:

> The problem with this approach is that it does not address the fact that waste heat, unlike garbage, can only be detected by means of a technologically advanced device. It is not readily accessible to "animals, children, scavengers, snoops, and other members of the public," as was the garbage in Greenwood. Furthermore, since dissipation is an inevitable result of heat production, it does not require a deliberate act nor is it preventable in the same way that one can conceal incriminating garbage. The laws of thermodynamics dictate that no matter how much one insulates, heat will still escape. Moreover, the fact that one insulates to keep heat in indicates a subjective expectation of privacy.

State v. Siegal, 934 P.2d at 186.

In United States v. Place, 462 U.S. 696, 103 S.Ct. 2637, 77 L.Ed.2d 110 (1983), the Supreme Court upheld the warrantless use of trained drug dogs to detect contraband in passenger luggage at an airport. There, Place's personal

luggage was temporarily detained so that law enforcement officials could expose it to a trained narcotics detection dog based upon their reasonable suspicion that Place's luggage contained contraband.

While it is true that the thermal imager, like a trained drug dog, merely extracts information about the interior of an object solely from an analysis of external physical phenomena, the Supreme Court in Place emphasized that it is the particularity with which a trained drug dog is able to detect contraband that justifies the dog's use. The Court stated:

> [T]he canine sniff discloses only the presence or absence of narcotics, a contraband item. Thus, despite the fact that the sniff tells the authorities something about the contents of the luggage, the information obtained is limited. This limited disclosure also ensures that the owner of the property is not subjected to the embarrassment and inconvenience entailed in less discriminate and more intrusive investigative methods. In these respects, the canine sniff is sui generis. We are aware of no other investigative procedure that is so limited both in the manner in which the information is obtained and in the content of the information revealed by the procedure.

United States v. Place, 462 U.S. at 707. This same justification cannot be extended to the use of a thermal imaging device. To the contrary, the thermal imaging device, unlike the trained drug dog, does not have the ability to

distinguish between legal and illegal activities occurring within the home based upon the amount of extraneous heat detected. "In this respect, [use of the thermal imager] is the very antithesis of a dog sniff because the trained narcotics dog alerts only in the presence of contraband whereas the thermal imager indiscriminately registers all sources of heat." People v. Deutsch, 52 Cal.Rptr.2d at 369.

Based on the foregoing, we do not find use of the thermal imager here analogous to the warrantless searches upheld in Greenwood or Place. We do, however, find the analysis employed by the Supreme Court in United States v. Karo, 468 U.S. 705, 104 S.Ct. 3296, 82 L.Ed.2d 530 (1984), to be applicable.

In Karo, government agents installed a beeper in a can of ether. The ether was obtained by Respondent Karo from a government informant and was to be used to extract cocaine from clothing that had been imported into the United States. Agents then tracked the movements of the can, using visual surveillance at times, and the beeper exclusively at times. Eventually, agents tracked the beeper inside a private residence. Thereafter, agents obtained a warrant to search the residence based, in part, on the information derived through the use of the beeper.

One of the issues addressed by the Court was "whether the monitoring of a beeper in a private residence, a location not open to visual surveillance, violates the Fourth Amendment rights of those who have a justifiable interest in the privacy of the residence." Id. at 714. The Court ultimately answered this question in the affirmative, noting the following:

Appendix A

> At the risk of belaboring the obvious, private residences are places in which the individual normally expects privacy free of governmental intrusion not authorized by a warrant, and that expectation is plainly one that society is prepared to recognize as justifiable.

Id.

The Court found that the use of the beeper was no more proper than if a DEA agent, without a warrant, entered the house in order to verify its presence. The Court stated:

> For purposes of the Amendment, the result is the same where, without a warrant, the Government surreptitiously employs an electronic device to obtain information that it could not have obtained by observation from outside the curtilage of the house.
>
> * * *
>
> The monitoring of an electronic device such as a beeper is, of course, less intrusive than a full scale search, but it does reveal a critical fact about the interior of the premises that Government is extremely interested in knowing and that it could not have otherwise obtained without a warrant.

Id. at 715 (emphasis added).

Appendix A

Like the beeper used by government agents in Karo, the WASP device employed in this case also revealed critical information regarding the interior of the premises that could not have otherwise been obtained without a warrant. As the Cusumano court observed,

> [t]he machine intruded upon the privacy of the home not because it records white spots on a dark background but rather because the interpretation of that data allows the government to monitor those domestic activities that generate a significant amount of heat. Thus, while the imager cannot reproduce images or sounds, it nonetheless strips the sanctuary of the home of one vital dimension of its security: the 'right to be let alone' from arbitrary and discretionary monitoring of our actions by government officials.

Cusumano, 67 F.3d at 1504 (citations and footnote omitted).

Based on the foregoing, we conclude that Appellee met the requirements of Katz and thus established that a search implicating the Fourth Amendment occurred when law enforcement agents scanned his home with the WASP device. Accordingly, we hold that the warrantless use of the WASP device violated the Fourth Amendment and affirm the Superior Court's decision holding the same.

Justice NIGRO concurs in the result.

Justice CASTILLE files a Dissenting Opinion.

Appendix A

CASTILLE, Justice, dissenting.

The majority holds that the use of an infrared thermal imaging device to scan a private residence without a search warrant constitutes an unlawful search in violation of the Fourth Amendment to the United States Constitution, and affirms the decision of the Superior Court. I respectfully dissent and, therefore, would reverse.

In order for the use of a thermal imaging device to constitute an unreasonable search under the Fourth Amendment, appellee must show a legitimate expectation of privacy in heat vented from his home — that is, an actual expectation of privacy that society deems to be reasonable. Katz v. United States, 389 U.S. 347, 361, 88 S.Ct. 507, 19 L.Ed.2d 576 (1967). The majority found that appellee has a reasonable expectation of privacy in the heat vented from his home in the instant case. I disagree.

In United States v. Ford, 34 F.3d 992 (11th Cir.1994), the Eleventh Circuit Court of Appeals upheld the use of a thermal imaging device when it was used to detect the heat vented from a mobile home in which marijuana was grown. Like the scenario in the instant case, a confidential informant provided police with information that the defendant in Ford was growing marijuana in the mobile home, and the police used the thermal imaging device as a further investigative tool to confirm the information obtained from the confidential informant. There, the court stated:

> [T]he thermal imagery at issue here appears to be of such low resolution as to render it incapable of

> revealing the intimacy of detail and activity protected by the Fourth Amendment. A thermal imager operates by detecting differences in the surface temperature of objects; it cannot penetrate walls or windows to reveal conversations or, as used here, human activities. Although the device used by the [police officers] can detect differences as small as half of a degree, as used against Ford it could only describe conditions within the mobile home in gross detail. The [police] operator was able to detect high heat transmission from underneath the mobile home and in one corner wall of the structure, extending up four or five feet from the floor. Such information is neither sensitive nor personal, nor does it reveal the specific activities within the mobile home. Id. at 996-97. Thus, the court found that the defendant had no actual expectation of privacy.

The Ford court went on to find that precedent from the United States Supreme Court suggests that the defendant's expectation of privacy in vented heat from his mobile home is not one that society is prepared to accept as reasonable. Id. at 997 (citing California v. Greenwood, 486 U.S. 35, 108 S.Ct. 1625, 100 L.Ed.2d 30 (1988) (no reasonable expectation of privacy in garbage left for collection outside the curtilage of a home); Air Pollution Variance Board of Colorado v. Western Alfalfa Corp., 416 U.S. 861, 94 S.Ct. 2114, 40 L.Ed.2d 607 (1974) (a health inspector may observe smoke plumes emitted from a chimney without a search warrant); United States v. Place, 462 U.S. 696, 103 S.Ct. 2637, 77 L.Ed.2d 110 (1983) (exposure of luggage in a public

place to trained canines does not constitute a search under the Fourth Amendment)).

I find the reasoning of the Ford court to be persuasive. The use of a thermal imaging device as an investigative tool is analogous to the use of binoculars — it merely enhances that which can be lawfully observed. Escaping or vented heat from a home is not the type of personal effect protected by the Fourth Amendment or Article 1, Section 8 of the Pennsylvania Constitution. Rather, it is simply another form of waste product emitted from a home that is of the same type that the United States Supreme Court has held is not protected by the Fourth Amendment.

In the instant case, as in Ford, a confidential informant told police appellee was growing marijuana in his home. The majority here overlooks the essential fact that the use of this device was not part of a random scan of the neighborhood for sources of heat that may indicate an illegal marijuana cultivation scheme within a residence. The police only used the thermal imaging device as an investigative tool to confirm the information provided by the confidential informant. Appellee had no reasonable expectation of privacy in the heat vented from his home as a result of his agricultural activity. Thus, I believe that the use of a thermal imaging device to detect the vented heat was not an unlawful search in violation of the Fourth Amendment, and I would reverse the decision of the Superior Court.

APPENDIX B — OPINION OF THE SUPERIOR COURT OF PENNSYLVANIA DATED AND FILED DECEMBER 24, 1997

COMMONWEALTH of Pennsylvania

v.

Gregory GINDLESPERGER,

Appellant.

Superior Court of Pennsylvania.

Argued June 24, 1997.

Filed Dec. 24, 1997.

* * *

Before KELLY, J., CERCONE, President Judge Emeritus, and BROSKY, J.

CERCONE, President Judge Emeritus:

This is an appeal nunc pro tunc[1] from the judgment of sentence entered upon appellant's conviction of possession

1. Appellant's initial appeal to the Superior Court was dismissed because of the failure of counsel to file a brief. Appellant filed a motion for post-conviction relief on November 12, 1996 in which he requested that the lower court grant him permission to file an appeal nunc pro tunc. The lower court granted the PCRA petition and reinstated appellant's direct appeal rights on November 26, 1996. The court gave appellant thirty days in which to file his appeal. Appellant filed a notice of appeal on December 24, 1996.

of marijuana[2] and manufacture of a controlled substance (marijuana).[3] We vacate the judgment of sentence.

We adopt the lower court's statement of the pertinent facts of the case:

> Pursuant to a search warrant issued on April 9, 1994, police officers entered the basement area of the defendant's residence and seized approximately 21 marijuana plants. The probable cause for the search warrant was based, in part, on information provided by a confidential informant (hereinafter "CI") that the defendant, Gregory Gindlesperger, was growing marijuana plants in his basement. Further, independent verification of this tip came when the police officer employed a thermal detection device and observed the emanation of heat waste from the defendant's house that was consistent with marijuana production activities.
>
> . . .
>
> According to the affidavit of probable cause for a search warrant, the CI told Officer Gerald Pfadt that he/she observed marijuana plants growing at the defendant's residence during February 1994. The CI stated that the plants were located in the

---

2. 35 P.S. § 780-113(a)(16).

3. Id., § 780-113(a)(30).

basement and consisted of about 8 adult plants and 30 clone plants. The CI accurately described the appearance of marijuana plants to Officer Pfadt.

Officer Pfadt has been working as a police officer for 9 years, and he has been a member of the Erie County Mobile Drug Task Force for 5 years. He has been involved directly or has assisted in numerous investigations concerning violations of the drug law, including investigations of those who manufacture or grow controlled substances, such as marijuana, in indoor environments.

Officer Pfadt asked the CI to confirm marijuana production in the defendant's basement, and during the week of February 13, 1994, the CI did so. In March 1994, the CI told Officer Pfadt that the defendant was now using artificial lights to facilitate marijuana growth.

On March 17, 1994, Captain Gregory Davis of the Pennsylvania Army National Guard Drug Task Force viewed the defendant's residence through a thermal detection device, hereinafter referred to as a "WASP." This device is designed to distinguish appreciable and noticeable amounts of extraneous heat. Captain Davis detected "an unexplainable source of heat coming from the basement area that was not consistent with the location of the furnace or other known heat sources." He also checked five residences of

similar structure and design on either side of the defendant's residence and detected no such heat pattern.

On April 9, 1994, a search warrant was issued. Within three days prior to this, the CI again confirmed the production of marijuana plants at the defendant's house. The search warrant was based, in part, on the fact that "[t]his heat source would be consistent with the heat source coming from the artificial lighting used in the growing of marijuana." Officer Pfadt averred that "individuals who grow marijuana in an indoor setting do so in a continuing operation and have plants in various stages of growth so as to be able to have a continuous supply of marijuana to be harvested." He also averred that "the CI has provided information to this officer in the past that has been proven reliable and will result in the arrests of individuals for violations of the drug laws."

During the search of the defendant's residence, the police found marijuana plants growing in the basement and artificial lighting equipment. The defendant was arrested and charged with various violations of the Controlled Substance, Drug, Device and Cosmetic Act, 35 P.S. § 708.101 et seq.

Trial court opinion, April 28, 1995, at 1-4 (citations omitted). Appellant filed a pre-trial motion to suppress the evidence

seized during the search of his residence. The lower court denied that motion and a bench trial was held on May 30, 1995. On June 2, 1995, the lower court found appellant guilty of the charges. The lower court sentenced appellant, on January 30, 1996, to three to five years imprisonment, one hundred hours of community service, a $15,000 fine, and costs. Appellant's motion to reconsider sentence was denied.

Appellant raises the following issues on appeal:

> 1. Whether the search warrant based upon information provided by a single and anonymous, first-time confidential informant plus an infrared thermal detection device was unsupported by sufficient and permissible probable cause, thus rendering the ensuing search and seizure of evidence from appellant's home violative of his federal Fourth Amendment and state Article I, section 8 constitutional protections?
>
> 2. Whether the Commonwealth's failure to disclose the identity of the confidential informant both before or at the time of the suppression hearing warrants suppression of the evidence and dismissal of the prosecution?
>
> 3. Whether the lower court's refusal to accept the appellant's assertion of medical necessity as a legitimate defense at trial and/or sentencing violated his due process and other fundamental constitutional guarantees afforded by amendments 5 and 14 of the United States Constitution and

Appendix B

Article I, Sections 1, 2 and 26 of the Pennsylvania Constitution?

4. Whether 35 P.S. § 780-113(a)(30) is unconstitutionally overbroad for failing to differentiate growing/manufacturing small amounts of marijuana for personal/medical use versus large amounts of marijuana for delivery to others?

5. Whether the Commonwealth failed to sufficiently prove the number of live marijuana plants to trigger the three-year mandatory prison sentence of 18 Pa.C.S. § 7508(a)(1)(ii)?

Appellant's brief, at 3.

Our standard of review of an order denying a suppression motion is as follows:

> When reviewing rulings of a suppression court, we must determine whether the record supports that court's factual findings. In so doing, we consider only the evidence of the prosecution and so much of the evidence for the defense as remains uncontradicted when read in the context of the record as a whole. Where the record supports the findings of the suppression court, we are bound by those facts and may reverse only if the legal conclusions drawn therefrom are in error.

Commonwealth v. Hughes, 536 Pa. 355, 366-67, 639 A.2d 763, 769 (1994). When faced with a conflict of testimony, the appellate court defers to the suppression court, which, as fact finder, passes upon the credibility of witnesses, and whose findings are not disturbed when supported by the record. Commonwealth v. Marshall, 523 Pa. 556, 568 A.2d 590 (1989).

Appellant's first contention on appeal is that the search warrant herein was not based on sufficient probable cause. Appellant advances three arguments related to this issue: (1) the warrantless use of the WASP device was an unlawful search in violation of the Fourth Amendment to the United States Constitution and Article I, section 8 of the Pennsylvania Constitution; (2) the nature of the WASP device and the way in which it was used rendered the information contained in the probable cause affidavit too unreliable to support a finding of probable cause for a warrant; and (3) the probable cause affidavit failed to establish that the confidential informant and/or his information was credible or reliable, and in fact was based on false or misleading information.

"The standard for evaluating whether probable cause exists for the issuance of a search warrant is the 'totality of the circumstances' test as set forth in Illinois v. Gates, 462 U.S. 213, 103 S.Ct. 2317, 76 L.Ed.2d 527 (1983) and adopted by [the Pennsylvania Supreme Court] in Commonwealth v. Gray, 509 Pa. 476, 484, 503 A.2d 921, 925 (1985)." Commonwealth v. Jones, 542 Pa. 418, 424, 668 A.2d 114, 116 (1995). "A magistrate is to make a 'practical, common-sense decision whether, given all the circumstances set forth

in the affidavit before him, including the "veracity" and "basis of knowledge" of persons supplying hearsay information, there is a fair probability that contraband or evidence of a crime will be found in a particular place.' " Id. at 424, 668 A.2d at 116-17 (citations omitted).

> The information offered to establish probable cause must be viewed in a common sense, nontechnical manner and deference must be accorded to the issuing magistrate. The duty of a court reviewing the decision is to ensure that the magistrate had a substantial basis for concluding that probable cause existed.

Id. at 424, 668 A.2d at 117 (citations omitted).

Appellant claims that the warrantless use of the WASP device was an unconstitutional search under both the Fourth Amendment to the United States Constitution and Article I, Section 8 of the Pennsylvania Constitution. We will first examine this claim under the Fourth Amendment. The Fourth Amendment protects "[t]he right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures. . . ." U.S. Const. amend. IV. "[T]he touchstone of Fourth Amendment analysis has been the question of whether a person has a 'constitutionally protected reasonable expectation of privacy.' " Oliver v. United States, 466 U.S. 170, 177, 104 S.Ct. 1735, 1740-41, 80 L.Ed.2d 214, 223 (1984), quoting Katz v. United States, 389 U.S. 347, 360, 88 S.Ct. 507, 516, 19 L.Ed.2d 576, 587 (1967) (Harlan, J., concurring). An unreasonable search under the Fourth Amendment occurs when (1) a person has

exhibited an actual expectation of privacy; and (2) the expectation is one that society is prepared to recognize as reasonable. Katz v. United States, 389 U.S. at 361, 88 S.Ct. at 516, 19 L.Ed.2d at 588 (Harlan, J., concurring); Commonwealth v. Oglialoro, 525 Pa. 250, 579 A.2d 1288 (1990).

"The Fourth Amendment has stressed 'the overriding respect for the sanctity of the home that has been embedded in our traditions since the origins of the Republic.' " Oliver v. United States, 466 U.S. 170, 178, 104 S.Ct. 1735, 1741, 80 L.Ed.2d 214, 224 (1984). The courts have extended Fourth Amendment protection to the "curtilage" of the home, "and they have defined the curtilage, as did the common law, by reference to the factors that determine whether an individual reasonably may expect that an area immediately adjacent to the home will remain private." Id. at 180, 104 S.Ct. at 1742, 80 L.Ed.2d at 225. "The curtilage area surrounding a private house is entitled to protection under the Fourth Amendment as a place where the occupants have a reasonable expectation of privacy that society is prepared to accept." Commonwealth v. Lemanski, 365 Pa.Super. 332, 349, 529 A.2d 1085, 1093 (1987), citing Dow Chemical Co. v. United States, 476 U.S. 227, 106 S.Ct. 1819, 90 L.Ed.2d 226 (1986). The curtilage "is often afforded a greater privacy protection than an open field because of the traditional significance of the home as a haven from governmental intrusions." Commonwealth v. Oglialoro, 525 Pa. at 258, 579 A.2d at 1292.

In the instant case, the lower court found that the warrantless search of appellant's home with the WASP device was not a search under the Fourth Amendment. The

lower court relied on United States v. Ford, 34 F.3d 992 (11th Cir.1994) and related cases[4] for the conclusion that a homeowner does not have a reasonable expectation of privacy in "vented heat" or "heat waste." The lower court reasoned that the discharge of heat or other substances, "visible or invisible to the naked eyes, are not so personal and intimate" in detail as to threaten the interests "which form the basis for the need for protection of a residence, namely the intimacy, personal autonomy and privacy associated with a home." Trial court opinion, January 27, 1995, at 7, quoting United States v. Pinson, 24 F.3d 1056, 1059 (8th Cir.1994), cert. denied, 513 U.S. 1057, 115 S.Ct. 664, 130 L.Ed.2d 598 (1994). The lower court relied heavily on its conclusion that the WASP device or thermal imager, does not produce the intimacy of detail that would amount to intrusiveness violative of the Fourth Amendment. Trial court opinion at 11.

The lower court also likened the use of the WASP device to the use by police of surveillance dogs trained to detect the odor of illegal contraband. Id. at 8, citing United States v. Place, 462 U.S. 696, 103 S.Ct. 2637, 77 L.Ed.2d 110 (1983). The court noted that both the "heat waste" theory and the "dog sniff" theory in relation to thermal imagers have been accepted by some courts and rejected by others.

The "heat waste" theory was criticized in People v. Deutsch, 44 Cal.App.4th 1224, 52 Cal.Rptr.2d 366 (1996),

4. E.g., United States v. Pinson, 24 F.3d 1056 (8th Cir.1994), cert. denied, 513 U.S. 1057, 115 S.Ct. 664, 130 L.Ed.2d 598 (1994); United States v. Penny-Feeney, 773 F.Supp. 220 (D.Hawai'i 1991), aff'd, 984 F.2d 1053 (9th Cir.1993).

where the court pointed out that the thermal imager "does not simply measure the waste heat radiating from a structure, but it measures all temperature differentials across the exterior surface of a structure." Id. 52 Cal.Rptr.2d at 368. "Therefore, the function of the device is to paint an infrared picture of the heat sources which permits inferences about the heat generating activities occurring within the residence." Id. The Deutsch court found the decision of the United States Supreme Court in United States v. Karo, 468 U.S. 705, 104 S.Ct. 3296, 82 L.Ed.2d 530 (1984), more analogous to thermal imaging searches than the "heat waste" theory.

In Karo, agents of the Drug Enforcement Administration inserted a beeper in a can of ether and then monitored the movement of the can.[5] At several points during the surveillance, the police were able to determine that the can of ether was located in a private home. At the end of the surveillance, the agents got a search warrant for a house rented by two of the defendants, in which the can of ether containing the beeper was located. The search yielded cocaine and laboratory equipment. The United States Supreme Court found that the monitoring of the beeper while the can was located in a private residence, violated the Fourth Amendment because it "reveal[ed] a critical fact about the interior of the premises that the Government is extremely interested in knowing and that it could not have otherwise obtained without a warrant." Id. at 714-15, 104 S.Ct. at 3303, 82 L.Ed.2d at 541-42. Relying on Karo, the Deutsch court held that the warrantless thermal imaging scan conducted

5. The agents in Karo were following the ether because they had learned that it was to be used to extract cocaine from clothing which had been imported to the United States.

by the police in that case "told the police something about activities within the house which they could not otherwise have learned without obtaining a warrant to search it." People v. Deutsch, 52 Cal.Rptr.2d at 369.

In rejecting the "canine sniff" cases as applicable to thermal imaging scans, the Deutsch court reasoned:

> Precisely because the thermal imager is indiscriminate in registering sources of heat it is an intrusive tool, which tells much about the activities inside the home which may be quite unrelated to any illicit activity. In this respect it is the very antithesis of a dog sniff because the trained narcotics dog alerts only in the presence of contraband, whereas the thermal imager indiscriminately registers all sources of heat.

Id. at 369 (citation omitted). Similarly, in U.S. v. Field, 855 F.Supp. 1518 (W.D.Wis.1994), the court found that thermal imaging is more intrusive than a "canine sniff" for contraband. The court therein reasoned:

> Thermal imaging can extract information from within a person's home, the place most deserving of protection from government intrusion . . . The imager can pick up heat sources of many kinds, including those not commonly thought of as such. To this extent the imager "intrudes" into the home, the place that has always enjoyed the highest level of protection in Fourth Amendment jurisprudence. A person can expect that his movements in a car

> may be tracked or that the suitcase he takes with him on a trip might be subject to inspection; he does not expect that his activities within his own home will be subject to high technology surveillance of the sort employed here. Unlike the dogs employed to sniff for contraband, the thermal imager picks up information of lawful activities as well as unlawful.

Id. at 1519. See also State v. Young, 123 Wash.2d 173, 867 P.2d 593, 598-99 (1994) ("the infrared thermal detection investigation represents a particularly intrusive method of surveillance which reveals information not otherwise lawfully obtained about what is going on within the home").

Relevant decisions of the United States Supreme Court concerned with police surveillance methods are useful in discerning the reasonableness of warrantless thermal imaging scans. In Dow Chemical Co. v. United States, supra, 476 U.S. 227, 106 S.Ct. 1819, 90 L.Ed.2d 226 (1986), officials of the Environmental Protection Agency flew over Dow's manufacturing facility at altitudes of 12,000, 3,000, and 1,200 feet. The officials employed a commercial aerial photographer who used a "precision aerial mapping camera" to take photographs of the facility at those altitudes. Id. at 229, 106 S.Ct. at 1822, 90 L.Ed.2d at 232. The Supreme Court held that the search did not violate the Fourth Amendment. The court found that the curtilage doctrine did not apply to the open areas of this industrial facility, and that the photographs taken "were not so revealing of intimate detail as to raise constitutional concerns." Id. at 238, 106 S.Ct. at 1827, 90 L.Ed.2d at 236-38. The court in Dow found

the photographs limited to "an outline of the facility's buildings and equipment," and not revealing of anything more "intimate." Id. at 238-39, 106 S.Ct. at 1827, 90 L.Ed.2d at 237-38.

The warrantless search found acceptable in Dow Chemical is distinguishable from a thermal imaging scan of a person's home in that a thermal scan looks into the curtilage of the home. With a thermal imager, the police actually scan the walls of a person's home. In addition, a thermal imager makes visible to the human eye what would not be visible without it. The thermal device makes visible not just the outline of a structure, but the location of "hot spots" within it. Thus, a thermal scan is more revealing of "intimate details" than were the aerial photographs in Dow.

In California v. Ciraolo, 476 U.S. 207, 106 S.Ct. 1809, 90 L.Ed.2d 210 (1986), the United States Supreme Court addressed a police fly-over of defendant's backyard at an altitude of 1000 feet (within navigable airspace). From this vantage point, the officers identified marijuana plants eight to ten feet high growing in the backyard, and photographed them with a standard 35 mm camera.

The Supreme Court found that this search did not violate the Fourth Amendment. The court held that although the police looked into the protected curtilage area of the home, the Fourth Amendment does not require the police "to shield their eyes when passing by a home on public thoroughfares." Id. at 213, 106 S.Ct. at 1812, 90 L.Ed.2d at 216. "Nor does the mere fact that an individual has taken measures to restrict some views of his activities preclude an officer's

observations from a public vantage point where he has a right to be and which renders the activities clearly visible." Id. (emphasis added). The Ciraolo court concluded that since the officers were able to "observe plants readily discernible to the naked eye as marijuana," the search was not an unreasonable one under the Fourth Amendment. Id. at 213, 106 S.Ct. at 1812, 90 L.Ed.2d at 217. Similarly, in Florida v. Riley, 488 U.S. 445, 109 S.Ct. 693, 102 L.Ed.2d 835 (1989), the court found permissible under the Fourth Amendment a helicopter fly-over during which the police observed, with naked-eye surveillance, marijuana growing in a greenhouse within the curtilage of defendant's home.

The police searches in Ciraolo and Riley entered into the curtilage of the defendants' homes, but the police conducted those searches with "naked eye" surveillance. In contrast, in a thermal imaging scan, the search enters the curtilage of the home not with the naked eye, but with a surveillance device that makes visible what otherwise could not be seen. The search gives the police information about activities in the suspect's home, i.e., that he is engaged in some type of activity therein which involves more heat production than normally is generated inside a home. The search does not tell the police whether the activity occurring inside the home is legal or illegal.

Relevant decisions of the Pennsylvania Supreme and Superior Courts are also instructive on the issue of the reasonableness of thermal imaging searches. In Commonwealth v. Oglialoro, supra, 525 Pa. 250, 579 A.2d 1288, the police flew over appellee's barn in a helicopter. The roof of the barn consisted of transparent plastic sheets.

The police, by naked eye surveillance, observed marijuana growing in the barn. Id. at 254, 579 A.2d at 1289-91. The Pennsylvania Supreme Court likened this situation to one where a person leaves his windows open and uncovered so that any passerby might peer into one's dwelling. Id. at 256-57, 579 A.2d at 1291.

Although the barn was within the curtilage of the home, the Oglialoro court found that "[a]s long as the police have the right to be where they are, and the activity is clear and visible, the fact they are peering into curtilage is of no significance." Id. at 259, 579 A.2d at 1292. The court found that the search did not violate the Fourth Amendment on this basis.[6] A thermal imaging search differs from the type of search conducted in Oglialoro as thermal imaging scans are not done with the naked eye and the object of the search is not "clear and visible." Id. at 259, 579 A.2d at 1292.

In a very pertinent case, the Superior Court addressed the legality of police surveillance of a greenhouse connected to appellant's home. Commonwealth v. Lemanski, 365 Pa.Super. 332, 529 A.2d 1085 (1987). In Lemanski, a police officer stopped on a public road adjacent to appellant's residence and observed plants growing through the greenhouse roof. Due to the distance involved, the officer could not identify the plants. Later, that officer and another returned to the road, and using binoculars and a zoom lens,

---

6. However, the Oglialoro court also determined that the helicopter's presence at only fifty feet over the barn, although lawful, represented a "hazard" to persons and property on the ground. Id. at 262, 579 A.2d at 1294. On this basis, the search was found to be intrusive and unreasonable. Id.

scanned the greenhouse and identified the plants as marijuana. Id. at 337, 529 A.2d at 1087. The trial court refused to suppress the evidence.

On appeal, the Superior Court held that the greenhouse was within the curtilage of the home and was thus entitled to protection under the Fourth Amendment. The court found that the police were not able to view the greenhouse without finding an opening in the shrubbery and brush along the property line of the house, and had to use "much more than [the] naked eye" to view the contents of the greenhouse. Id. at 349-50, 529 A.2d at 1093. Thus, the court found that the officer's observations could not form the basis for the issuance of a search warrant. Id. at 350, 529 A.2d at 1094.

The result in Lemanski entirely supports a conclusion that the warrantless thermal imaging scan conducted here violated the Fourth Amendment. The police in Lemanski, as here, could not view the contraband with naked eye observation from their lawful vantage point. Thus, the search, which utilized binoculars and a zoom lens to make visible what the naked eye could not see, was found too intrusive to satisfy the Fourth Amendment's prohibition on unreasonable searches. Similarly, here, the police could not view the contraband they sought with naked eye surveillance from a lawful vantage point. Rather, the thermal imaging device, like the binoculars and zoom lens used in Lemanski, allowed the police to see what they otherwise could not.

The Commonwealth relies on Commonwealth v. Johnston, 515 Pa. 454, 530 A.2d 74 (1987) in support of its argument that the Fourth Amendment does not prohibit the

instant thermal imaging search. Johnston involved a canine-sniff search of a rental locker at a "Rent-a-Space" facility. The dog "alerted" at a locker belonging to defendant/appellant, where marijuana was subsequently found. The court concluded that the canine-sniff search did not violate the Fourth Amendment because the search was non-intrusive, the disclosure of information as a result of the search was extremely limited, the embarrassment and inconvenience of the search was minimal, and the items sniffed were located close to a public area (hallway). Id. at 462, 530 A.2d at 78.

Based on the reasoning of the Deutsch and Field cases, we find the "dog sniff" analogy unpersuasive in relation to thermal imaging. It is also clear that the Johnston case did not involve an intrusion into the curtilage of the home, as was the case with the thermal imaging scan here.

In the instant case, the police intruded into the protected curtilage of appellant's home when Captain Davis scanned the exterior walls of appellant's residence using the WASP device. The thermal imager made visible "hot spots" or "heat signatures," which were impossible to detect with the naked eye.

Although a thermal imager cannot detect "images" inside the walls of a home, the results of such a search do provide information about activities occurring inside the home, or items which may be contained therein. Thus, although a thermal imager does not penetrate the walls of a home, it nevertheless extracts from the outer walls information about occurrences within, which otherwise could not be obtained without a search warrant. See United States v. Karo, supra.

Like the Deutsch and Field courts, we do not find the "heat waste" analogy persuasive. As Captain Davis indicated in his testimony at the suppression hearing, the WASP device detects "heat signatures" on the walls of buildings. The thermal imager does not detect heat "vapors" escaping from a building so much as it looks at the walls of a structure to see if certain parts of it are "hotter" than other parts, or "hotter" than the walls of similar structures.

It is reasonable for individuals to expect that the police will not "read" the exterior walls of their homes with surveillance devices, searching for evidence of criminal activity. As the court stated in Field, "[a] person does not expect that his actions within his own home will be subject to high technology surveillance. . . ." United States v. Field, 855 F.Supp. at 1519. Similarly, the Deutsch court recognized that "nondisclosed activities within the home are those in which society accepts a reasonable expectation of privacy and therefore [are] activities which require a warrant for government intrusion." People v. Deutsch, 52 Cal.Rptr.2d at 368.

The record here shows that appellant exhibited an actual expectation of privacy in the activities occurring in his home. He took extreme care to conceal the area of his home in which he was growing the marijuana from the view even of persons within the home. Thus, both parts of the Katz test for an unreasonable search under the Fourth Amendment — i.e., (1) a person has exhibited an actual expectation of privacy, and (2) the expectation is one that society is prepared to accept as reasonable — are met under the facts of this case. See Katz v. United States, supra, 389 U.S. at 361, 88 S.Ct. at 516, 19 L.Ed.2d at 588 (Harlan, J., concurring).

We find it necessary to rule in this manner to maintain the constitutional protections to our citizens which continue to have vitality and importance despite the advance of technology in police surveillance. As the Pennsylvania Supreme Court has stated:

> To maintain freedom for all we must maintain an ordered society, which requires that we effectively enforce our laws. Thus, the strictures that are to be applied to preserve our freedom must never be allowed inadvertently to provide the vehicle for undermining it. Of equal concern is that we guard against surrendering in fear, in a perceived lawless era, fundamental protections that are essential to the preservation and maintenance of our free society.

Commonwealth v. Miller, 513 Pa. 118, 127-28, 518 A.2d 1187, 1192 (1986). We emphasize that the thermal imaging scan herein was conducted without a warrant. The results of the scan were used, in fact, to obtain a search warrant for the premises. For these reasons, we conclude that the use of the WASP device in the instant case violated the Fourth Amendment. Accordingly, that portion of the search warrant affidavit which relied on the information obtained as a result of the WASP scan was invalid and not a proper basis for issuance of the warrant.

Because we have found the thermal imaging search was violative of the Fourth Amendment, it is not necessary for us to specifically address appellant's contention that the search violated the Pennsylvania Constitution. However, it

is well-established that the Pennsylvania Constitution has been held to provide greater privacy protection than the Fourth Amendment. In the Interest of B.C., 453 Pa.Super. 294, 683 A.2d 919 (1996); Commonwealth v. Gayle, 449 Pa.Super. 247, 255 n. 9, 673 A.2d 927, 931 n. 9 (1996); Commonwealth v. Wright, 448 Pa.Super. 621, 627 n. 5, 672 A.2d 826, 829 n. 5 (1996).

Next, we must determine whether the information which was provided to the magistrate, other than that obtained as a result of the thermal imaging scan, was sufficient to support the issuance of the search warrant. See Commonwealth v. Lemanski, 365 Pa.Super. at 352, 529 A.2d at 1094 (when information obtained by unconstitutional search is determined to be an invalid basis for issuance of warrant, the question becomes whether the untainted information in the affidavit establishes probable cause for a search warrant). If the information provided by the WASP scan is omitted, the affidavit of probable cause in the instant case consisted of Officer Pfadt's attestations that he has been a police officer for nine years, a member of the Erie County Drug Task Force for five years, has investigated numerous violations of the Drug Act, is familiar with the methods used by individuals who sell and use controlled substances in violation of the law, and has been involved in numerous investigations involving the growing of controlled substances such as marijuana in an indoor environment. The affidavit then provided:

> During February 1994 an individual, whose identity is known to this officer, and will be referred to herein after as CI # 1, told this officer

that he/she observed marijuana plants growing in the residence of Gregory Gindlesperger located at 807 Eldred St., Harborcreek Twp., Erie, Pennsylvania. CI # 1 stated that he/she is familiar with the appearance of a growing marijuana plant and the description of the marijuana plants given to this officer by CI # 1 is consistent with the appearance of marijuana plants known to this officer. CI # 1 stated that the plants are located in the basement area of the residence and consist of approximately eight adult plants and thirty clone plants.

During the week of February 13, 1994 this officer instructed CI # 1 to confirm the marijuana plants were still being grown in the residence of Gindlesperger. The CI # 1 later contacted this officer and stated the marijuana was still being grown within the residence.

During March 1994 CI # 1 stated that Gindlesperger has artific[i]al lighting set up to assist in the growing process of the marijuana plants.

Within the last seventy-two hours CI # 1 again observed the growing marijuana plants in the residence of Gindlesperger.

Individuals who grow marijuana in an indoor setting do so in a continuing operation and have plants in various stages of growth so as to be able to have a continuous supply of marijuana to be

> harvested. This is based on this officer's experience and training.
>
> CI # 1 has provided information to this officer in the past that has been proven reliable and will result in the arrests of individuals for violations of the drug laws.

Search Warrant and affidavit, April 9, 1994 (emphasis added).

Appellant contends that the affidavit failed to establish that the confidential informant was reliable, and that his/her information was credible. Thus, he contends that the information in the affidavit attributable to the informant was not sufficient to establish probable cause for issuance of the search warrant. "A tip from an unnamed informant can properly form the basis for probable cause to issue a search warrant, provided there is adequate evidence of the informant's reliability." Commonwealth v. Lemanski, 365 Pa.Super. at 353, 529 A.2d at 1095. "[T]he reliability of the informant's information must be determined from the facts supplied by the police official." Id. A magistrate must consider four factors in determining the credibility of an unidentified informant and the reliability of his information:

> (1) Did the informant give prior reliable information? (2) Was the informant's story corroborated by another source? (3) Were the informant's statements a declaration against interest? (4) Does the defendant's reputation support the informant's tip?

Commonwealth v. Gray, 322 Pa.Super. 37, 47, 469 A.2d 169, 174 (1983). It is not necessary that the affidavit satisfy all four of these criteria. Id.

In the instant case, the informant's statements were not a declaration against interest, nor was there any information concerning appellant's reputation that would support the informant's tip. We have held that the corroborating information, i.e., was obtained by an illegal search. Thus, the only criterion remaining to establish the confidential informant's reliability is whether he had given prior reliable information.

The affidavit here indicated that the confidential informant had "provided information to this officer in the past that has been proven reliable and will result in the arrests of individuals for violations of the drug laws." The reliability of the informant depended on this statement in the affidavit.

Appellant argues that this statement was insufficient to establish the informant's reliability. In Commonwealth v. Jones, 542 Pa. 418, 668 A.2d 114 (1995), the Pennsylvania Supreme Court addressed the issue of the reliability of a confidential informant. In that case, the police officer/affiant stated in the affidavit of probable cause that the confidential informant

> has been reliable in the past with the arrest and conviction of the following people: J. Snoe on 7-18-92 for poss of Crack Cocaine, who received two years probation from Judge Little. L. Cargile on 7-23-92 for poss of Marij, who case is still

> pending in the Courts of Allegheny County. J. Newsome on 7-30-92 for poss with intent to Del Crack Cocaine, who case is still pending in the Courts of Allegheny County.

Id. at 423, 668 A.2d at 116. The Jones court found these assertions to be sufficient to establish the informant's reliability without additional corroboration. The court reasoned:

> [T]he magistrate was presented with an affidavit containing information from an informant who was known to police and had provided reliable information in the past. The affidavit specifically states that the informant had provided tips on three prior occasions, resulting in one conviction and two cases pending before the courts. Furthermore, the affidavit provides the names of the prior arrestees and the dates they were arrested.

Id. at 426, 668 A.2d at 117.

In the instant case, the police officer/affiant stated that the informant had provided reliable information in the past. However, unlike Jones, the informant's information, as of the date of the affidavit, had not resulted in the arrest or conviction of other persons. At most, the affidavit indicated that arrests would occur at some unspecified time in the future. Further, the affidavit in the instant case, unlike the one in Jones, provided no names or other details as to the arrests which were to take place.

Appendix B

The fact that an affidavit does not contain the names, dates, or other information concerning prior arrests or convictions is not necessarily fatal to a determination that a confidential informant gave reliable information. See Commonwealth v. Miller, supra, 513 Pa. 118, 518 A.2d 1187 (Commonwealth not required to disclose names of persons anonymously referred to in affidavit as having been previously arrested on the basis of informant's tip, where such disclosure would lead to identification of confidential informant and informant would then be in danger). However, in the instant case, the affidavit not only lacked this specific information, it also stated that the informant's prior information "will lead" to arrests, rather than stating the customary "has in the past resulted in" arrests or convictions.

We have reviewed numerous cases in which the reliability of a confidential informant has been sustained on the basis that he has given prior reliable information. In none of those cases was there an allegation that the informant's information "will lead" in the future to arrests or convictions. E.g., Commonwealth v. Jones, supra; Commonwealth v. Rodriguez, 526 Pa. 268, 585 A.2d 988 (1991); Commonwealth v. Dosch, 348 Pa.Super. 103, 501 A.2d 667 (1985); Commonwealth v. Healey, 331 Pa.Super. 199, 480 A.2d 313 (1984); Commonwealth v. Prosdocimo, 308 Pa.Super. 187, 454 A.2d 84 (1982).

"[T]he reliability of the informant's information must be determined from the facts supplied by the police official." Commonwealth v. Lemanski, 365 Pa.Super. at 353, 529 A.2d at 1095. The duty of a court reviewing the issuance of a search warrant is "to ensure that the magistrate had a substantial

basis for concluding that probable cause existed." Commonwealth v. Gray, supra, 509 Pa. at 484, 503 A.2d at 925. Here, the "facts supplied by the police official" were lacking in detail as to the prior information provided by the confidential informant. In addition, the affiant did not assert that the prior tips had in fact resulted in arrest(s) or conviction(s). With both of these deficiencies, the reliability of the confidential informant was not established by the affidavit, even under a totality of the circumstances test.[7]

We conclude that the information in the affidavit which was provided by the confidential informant, did not establish probable cause for issuance of the search warrant. Thus, the search warrant was not supported by probable cause. The lower court therefore erred in failing to suppress the results of the search. Accordingly, we must vacate the judgment of sentence which was based on the evidence improperly seized herein.

Appellant's next contention on appeal is that the trial court erred in failing to require the Commonwealth to disclose the identity of the confidential informant. Given our ruling that the trial court erred in denying appellant's motion to suppress, it is not necessary for us to address this issue.

Appellant next argues that the trial court erred in "rejecting" his defense of medical necessity. Appellant contends that his sole purpose for growing and using the marijuana seized herein was for the treatment of his deafness, tinnitus, and excruciating headaches. Appellant asserts that

---

7. See Commonwealth v. Gray, supra, 509 Pa. at 484, 503 A.2d at 925.

the trial court should have accepted this defense at trial and at sentencing.

The trial judge in the instant case sat as the fact-finder, as appellant was tried in a non-jury trial. Appellant presented his defense of medical necessity at trial, in a short direct examination conducted by defense counsel. No objection was made to this testimony. At the close of testimony, the trial court permitted the parties to make closing statements. Counsel for appellant did not raise the issue of medical necessity in his closing argument to the court. Nor did appellant file post-trial motions, in which he could have raised the defense.

At sentencing, appellant did raise the issue of medical necessity in relation to the sentence to be imposed. Appellant argued that sentencing him to a period of incarceration, where he grew and used the marijuana for his medical needs, violates his constitutional rights under Article I, Sections 1, 2, and 26 of the Pennsylvania Constitution and under the Fifth and Fourteenth Amendments of the United States Constitution. Appellant asserts that his right to have access to the use of marijuana as a medical treatment to alleviate his suffering is an "important" right, which requires a heightened standard of review in evaluating the constitutionality of the sentencing statute, 18 Pa.C.S.A. § 7508(a)(1).

In a similar vein, appellant argues that 35 P.S. § 780-113(f)(2), which classifies the manufacture of marijuana as a felony, even if solely for personal use, and sets forth a maximum penalty of five years, is

unconstitutionally overbroad. Appellant argues that the statutory scheme is unfair because it treats all manufacturing of marijuana the same, regardless of its purpose or the amount manufactured. In addition, appellant argues that the evidence was not sufficient to prove that he possessed twenty-one live marijuana plants; thus, he was improperly sentenced under section 7508(a)(1)(ii), which imposes a mandatory three year prison sentence where there are at least twenty-one (21) but less than fifty-one (51) live plants.

The lower court denied all of appellant's arguments concerning sentencing, without benefit of an opinion, but relying on Commonwealth v. Burnsworth, 543 Pa. 18, 669 A.2d 883 (1995). In Burnsworth, the defendant pled guilty to manufacture of marijuana and possession with intent to deliver marijuana, but contested the mandatory minimum sentencing provisions as to the number of plants confiscated. The Pennsylvania Supreme Court ruled that the language of section 7508(a)(1) is clear and unambiguous, and that under that language, the term "plant" should be construed according to its common usage. The court noted that the legislature enacted the statute to deter drug trafficking, and to deter the growing of marijuana. Further, the court held that "the legislative classification treating growers of marijuana differently from individuals who possess certain quantities of marijuana, must be evaluated under the 'rational basis' analysis." Id. at 29, 669 A.2d at 889. The court found that the rational basis test was met, in that "increased penalties for violations involving actual marijuana plants was enacted to discourage or, in fact, deter the production, or growth, or marijuana." Id. at 30, 669 A.2d at 889.

Appendix B

While the Burnsworth case does not address the medical necessity issue in relation to sentencing, it does address the issue of the constitutionality of the statute in terms of its classification "treating growers of marijuana differently" from possessors thereof, as well as the issue of what constitutes a marijuana "plant" for purposes of the statute. We decline to further analyze appellant's arguments related to his sentence, however, because we are vacating the judgment of sentence based on our ruling that the lower court should have suppressed the evidence seized herein. As any conclusions we would make on appellant's sentencing issues would therefore constitute mere dicta, it is not appropriate at this time to engage in a substantive constitutional analysis of the sentencing statutes in light of appellant's medical necessity issue. Such an analysis would be more appropriate in a case in which the lower court's determination of guilt is upheld. In such a case, the issue of medical necessity as related to sentencing could be properly addressed.

Judgment of sentence vacated; denial of motion to suppress is reversed; jurisdiction relinquished.

BROSKY, J., files a dissenting opinion.

Appendix B

BROSKY, Judge, dissenting.

The Fourth Amendment to the United States Constitution protects the citizens of the United States from unreasonable searches and seizures. By implication then, citizens are not free from government intrusion of all kinds, merely, unreasonable intrusion. If there were Paradise on earth, a kind of Nirvana, there would be no government intrusion of any kind. Indeed, in such a world there may not be a need for government at all. On the earth we know governments exist to provide for the people of the land. Laws exist in an effort to provide order and prevent chaos and to protect the innocent from those who would do evil. Thus, there is a need for law enforcement authorities and law enforcement activities.

In constitutional law regarding search and seizure, unreasonableness is often closely tied to intrusiveness. The more intrusive the action of law enforcement agents the more unreasonable the action is deemed to be. Of course, intrusive action by law enforcement is not illegal if preceded by the issuance of a warrant ensuring the justification of the action. Since in the present case the police did not secure a warrant prior to conducting the heat radiation testing the fundamental question before us is whether or not such testing is intrusive enough to require the issuance of a warrant before being conducted. In my opinion it is not.

Technological advances are creating difficult questions regarding surveillance of criminal suspects. Electronic eavesdropping is possible and now, particularly if some of Hollywood's movie offerings are representative, it is possible

to "see" through walls in various ways to determine what a building's occupants are doing inside. Nevertheless, in my opinion, the conducting of the thermal detection test in the present case did not constitute a significant intrusion of appellant's privacy. The test was conducted from outside the residence, it did not disturb appellant's peace in any way and it revealed only minimal and generalized information which, by itself, was not of a sensitive nature. In my opinion the minimal invasion the test constitutes is outweighed by the public interest in effective law enforcement.

The majority provides an extensive analysis of fourth amendment law in an effort to persuade readers that the conducting of the thermal detection tests violated the fourth amendment. However, no cases in this Commonwealth have held so as yet. Thus, the initial determination of this issue lies with this panel. On one end of the fourth amendment spectrum entries into homes or wiretapping cannot be conducted without the issuance of a warrant. On the other end of the spectrum, a "flyover" of someone's property to observe what is going on below or the usage of trained dogs to sniff for drugs outside a rental space has passed constitutional scrutiny.[1] In my opinion, the intrusiveness of the thermal detection testing is more similar to the latter examples. Consequently, I would be inclined to find that the search did not violate appellant's rights under either the United States or Pennsylvania Constitution.

---

1. See, Commonwealth v. Oglialoro, 525 Pa. 250, 579 A.2d 1288 (1990), and Commonwealth v. Johnston, 515 Pa. 454, 530 A.2d 74 (1987).

APPENDIX C — OPINION AND ORDER OF THE COURT OF COMMON PLEAS OF ERIE COUNTY, PENNSYLVANIA, CRIMINAL DIVISION DATED AND FILED APRIL 28, 1995

IN THE COURT OF COMMON PLEAS
OF ERIE COUNTY, PENNSYLVANIA
CRIMINAL DIVISION

No. 1515 of 1994

COMMONWEALTH OF PENNSYLVANIA

v.

GREGORY GINDLESPERGER

OPINION

Pursuant to a search warrant issued on April 9, 1994, police officers entered the basement area of the defendant's residence and seized approximately 21 marijuana plants. The probable cause for the search warrant was based, in part, on information provided by a confidential informant (hereinafter "CI") that the defendant, Gregory Gindlesperger, was growing marijuana plants in his basement. Further, independent verification of this tip came when the police officer employed a thermal detection device and observed the emanation of heat waste from the defendant's house that was consistent with marijuana production activities. In seeking to suppress the evidence, the defendant argues that the Commonwealth's failure to disclose the CI's identity renders the search warrant invalid, as the information provided by the CI cast a substantial doubt as to his/her

credibility and reliability. The defendant also argues that the manner in which the thermal detection device was used renders the information in the search warrant too unreliable and speculative. A hearing on this matter was held before this court on February 22, 1995.[1]

I. *FACTS*

According to the affidavit of probable cause for a search warrant, the CI told Officer Gerald Pfadt that he/she observed marijuana plants growing at the defendant's residence during February 1994. The CI stated that the plants were located in the basement and consisted of about 8 adult plants and 30 clone plants. The CI accurately described the appearance of marijuana plants to Officer Pfadt.

Officer Pfadt has been working as a police officer for 9 years, and he has been a member of the Erie County Mobile Drug Task Force for 5 years. He has been involved directly or has assisted in numerous investigations concerning violations of the drug law, including investigations of those who manufacture or grow controlled substances, such as marijuana, in indoor environments.

Officer Pfadt asked the CI to confirm marijuana production in the defendant's basement, and during the week

---

1. On December 30, 1994, a hearing was held before this court to address the limited issue surrounding the constitutionality of the search by the use of thermal imager to detect heat emanating from the defendant's residence. The court subsequently filed an Opinion on January 27, 1995, noting that the pre-warrant use of thermal imager was a search which must be supported by a reasonable suspicion.

of February 13, 1994, the CI did so. In March 1994, the CI told Officer Pfadt that the defendant was now using artificial lights to facilitate marijuana growth.

On March 17, 1994, Captain Gregory Davis of the Pennsylvania Army National Guard Drug Task Force viewed the defendant's residence through a thermal detection device, hereinafter referred to as a "WASP". This device is designed to distinguish appreciable and noticeable amounts of extraneous heat. Captain Davis detected "an unexplainable source of heat coming from the basement area that was not consistent with the location of the furnace or other known heat sources." (See, Addenda A, Search Warrant, p. 3). He also checked five residences of similar structure and design on either side of the defendant's residence and detected no such heat pattern.

On April 9, 1994, a search warrant was issued. Within three days prior to this, the CI again confirmed the production of marijuana plants at the defendant's house. The search warrant was based, in part, on the fact that "[t]his heat source would be consistent with the heat source coming from the artificial lighting used in the growing of marijuana." (See, Addenda A, p. 3). Officer Pfadt averred that "individuals who grow marijuana in an indoor setting do so in a continuing operation and have plants in various stages of growth so as to be able to have a continuous supply of marijuana to be harvested." (See, Addenda A, p. 3). He also averred that "the CI has provided information to this officer in the past that has been proven reliable and will result in the arrests of individuals for violations of the drug laws." *Id.*

Appendix C

During the search of the defendant's residence, the police found marijuana plants growing in the basement and artificial lighting equipment. The defendant was arrested and charged with various violations of the Controlled Substance, Drug, Device and Cosmetic Act, 35 P.S. § 708.101 et seq.

At the suppression hearing on February 22, 1995, Officer Pfadt and Captain Davis affirmed what was stated in the search warrant. Captain Davis further testified that on March 17, 1994, he was certified in the use of the WASP device. (See Addenda B, Certification). He testified that the WASP device is periodically removed from service to ensure proper operation, and it was properly maintained and calibrated on the night in question. Captain Davis testified that based on his experience and training, the heat emanating from the defendant's basement was not caused by any appliances. What he observed was consistent with the heat source coming from the artificial lighting used in the growing of marijuana. He testified that he viewed 5 other residences of similar structure and design, and found none with the similar heat pattern as shown by that of the defendant. Captain Davis testified that he operated the WASP device on numerous occasions in the past, and did not always detect abnormal amounts of heat emanating from the structures he viewed. However, on those occasions that he detected an abnormal heat source consistent with indoor growing operations, he was always correct.

In an effort to rebut Commonwealth's position, the defendant first presented Eric Higgins, a close friend and business associate of the defendant. Mr. Higgins testified that the grow room was well concealed from everyone's

view, and that he himself did not find out about it until two years after he had befriended the defendant. Mr. Higgins testified that the defendant was very secretive about the hidden room, but also admitted that he was unsure if anyone else had knowledge of said room. Mr. Higgins testified that he was not always present at the defendant's residence prior to the execution of the search warrant. The defendant also testified at the suppression hearing on February 22, 1995. The defendant testified that he went to great lengths to conceal the growing room from everyone, and that only his wife and few others knew about it. The defendant testified that he confronted everyone who has ever seen the hidden room as to whether or not he/she was the CI in question. Not surprisingly, everyone denied being the CI. However, the defendant testified that based on his relationship with the members he talked to, he is certain that none of them could be the CI.

II. *DISCUSSION*

In seeking to suppress the evidence, the defendant attacks the credibility and reliability of the confidential informant ("CI") and the manner in which the WASP device was employed. The court will address each of these issues separately.

A. CONFIDENTIAL INFORMANT

Essentially, the defendant argues that no one, except for the very few persons he told, could have known about the hidden room. The defendant also argues that this raises the presumption that perhaps the CI is fictional or the basis for

his/her information is unreliable. The defendant argues that the disclosure of the CI's identity is necessary for his defense, and the failure to do so by the Commonwealth, both before or at the time of the hearing, warrants suppression of the evidence and dismissal of the charges. Also, the defendant attacks the credibility and reliability of the CI, indicating that the search warrant fails to state that the CI has provided information in the past which has implicated other persons in criminal activity, and which specific information has proven to be accurate and correct.

As to the claim surrounding the disclosure of the informant's identity, the court recalls *Commonwealth v. Miller*, 513 Pa. 118, 518 A.2d 1187 (1986), which addressed a similar issue. In *Miller*, the defense counsel challenged the veracity of the detective's recitals in the search-warrant affidavit regarding the reliability of his informant. Although the defense counsel did not directly seek the identity of the informant, he attempted to elicit from the detective the names of the anonymous individuals who were arrested on the strengths of "tips" from the informant. The detective refused to provide the requested names, stating that to do so would allow the defendant to deduce the identity of the informant. The trial court ruled that the detective had to make an *in camera* disclosure to defense counsel of the names in question. The detective refused, and the evidence was suppressed. The Superior Court reversed the suppression, holding that the *in camera* inquiry as to the identities of the prior arrestees should have been conducted by the hearing judge beyond the presence of the defendant and his counsel, but with the defense having the right to make an advance submission of questions to the judge. On appeal, the

Appendix C

Pennsylvania Supreme Court vacated the order excluding the evidence, and provided the following:

> The United States Supreme Court [in *Franks v. Delaware*] ruled that, if the defendant makes a substantial preliminary showing that a false statement knowingly and intentionally or with reckless disregard for the truth was included by the affiant in the warrant, *and if* the allegedly false statement is necessary to the finding of probable cause, the Fourth Amendment requires that a hearing [on the issue of veracity] be held at the defendant's request. What is particularly significant for our purposes is that the defendant was given the burden of establishing, at least *prima facie*, a material misrepresentation in the warrant's affidavit before inquiry would be constitutionally required by the Fourth Amendment. . . .
>
> There is, of course, a presumption of validity with respect to the affidavit supporting the search warrant. To mandate an evidentiary hearing, the challenger's attack must be more than conclusory and must be supported by more than a mere desire to cross examine. There must be allegations of deliberate falsehood or of reckless disregard for the truth, and those allegations must be accompanied by an offer of proof. They should point out specifically the portion of the warrant affidavit that is claimed to be false; and they should be accompanied by a statement of supporting reasons. . . .

Appendix C

> Again it must be emphasized that it is the police official, who requested the warrant, whose veracity is the subject of the inquiry. The justification for employing the exclusionary device in the first instance is to deter perjurious police statements. The reliability of the informant's information must be determined from the facts supplied by the police official. Once the affidavit is sufficient on its face the question of the veracity of the statements contained therein is directed to the truthfulness of the officer. It therefore cannot be convincingly argued that to withhold the identity of the informer would effectively impede defense counsel in testing the credibility of the police officer who is under oath and subject to cross-examination.

Commonwealth v. Miller, 513 Pa. at 130-134, 518 A.2d at 1193-1195 (emphasis in original) (citations omitted).

The *Miller* court then held that a defendant may not insist upon the disclosure of informant's identity in affidavit for a search warrant when the disclosure would jeopardize the safety of the informant. In addition, the defendant may not insist upon disclosure of any information that would directly lead to the ascertainment of informant's identity. The significance of *Miller* is that before the Commonwealth will be forced to reveal the informant's identity, the defendant must first make a showing that the disclosure is necessary. The necessity for the disclosure must be more than conclusory, and it must be supported by more than a mere desire to cross-examine the informant. Even so, the

Appendix C

"defendant may not insist upon disclosure of the informant's name where such disclosure would jeopardize the confidential informant's safety." *Commonwealth v. Twyman*, 425 Pa.Super. 198, 203, 624 A.2d 636, 638 (1993).

Turning to the case at hand, the court notes that the defendant has failed to meet the threshold standard enunciated in *Miller* which would warrant the disclosure of the CI. Specifically, the court notes that during the suppression hearing the defendant attempted to show that the CI could not possibly have seen the hidden room in question, and that this raises the presumption that the CI is perhaps fictional or the basis of his/her information unreliable. The defendant's preliminary showing in support of this allegation is as follows: (1) the grow room was well hidden from anyone's view; (2) those few who have seen it denied being the CI; (3) based on the defendant's relationship with these individuals, he has no reason to question their veracity; and (4) the defendant has gone to great lengths to find out the identity of the CI, but has been unsuccessful. Based on the foregoing assertion, the defendant claims that the disclosure of CI is necessary to determine whether he/she exists, and whether the basis for CI's information is reliable.

The court is sympathetic with the defendant's frustration in his failed attempts to disclose the CI's identity. However, the court cannot order the Commonwealth disclose the CI's identity on the mere assertion that he/she doesn't exist. Indeed, to do so would allow any defendant to claim that the disclosure of the informant is necessary once he makes a good faith effort to uncover the informant's identity. This

the court cannot do, especially in light of the testimony at the suppression hearing which revealed that the hidden room, while concealed within the basement walls, was nevertheless shown to other individuals.[2] Thus, despite the defendant's cleverest attempt to conceal his activity, a secret told is a secret lost. It's the price one pays when he entrusts his confidence to others, and the court in that instance will not aid the defendant ferret out his betrayer.

The defendant further argues that the disclosure of the CI's identity is necessary for his defense. In support thereof, the defendant cites Pa.R.Crim.P. 305(B)(2), which provides that the court may order the Commonwealth to disclose the identity of eyewitnesses upon a showing that it is material to his defense, reasonable, and in the interest of justice. As to this issue, the court finds the defendant's argument to be unpersuasive and without merit. The court recalls *Commonwealth v. Ross*, 424 Pa.Super. 570, 574, 623 A.2d 827, 829 (1993), which provides the following:

> It is well-settled that the Commonwealth has a qualified privilege "to refrain from disclosing the identity of an informer. . . ." Where the confidential informant is not a witness to the incident at issue, the defendant must show that the Commonwealth's disclosure of the identity

---

2. Besides the defendant, other individuals who saw or knew about the hidden room included his wife, Mr. Higgins, a cousin and a good friend. The defendant also admitted that at least one of these individuals had mentioned the hidden room and its marijuana plants to others. (See, Defendant's Brief in Support of Pre-Trial Suppression Motions, 3/9/95, pp. 6-7).

> of the informant is "(1) material to his defense; (2) reasonable; and (3) in the interest of justice." Once such a showing is made by the defendant, it is within the discretion of the trial court to determine whether the circumstances require production of the informant.

(citations omitted).

As to whether the disclosure of the CI's identity is material to the defense, the court notes that the CI was not an eyewitness during the execution of the search warrant or during the period when Officer Pfadt and Captain Davis surveyed the defendant's residence with the WASP device. Thus, the CI would be unable to provide the defendant with any information which would enlighten him as to that portion of the affidavit. Further, in the case at bar the CI's information was corroborated by an independent police investigation, and the affiant was present during the suppression hearing and subject to cross-examination. In that regard, the CI was not a material witness to the incident at issue, which is the possession and manufacture of marijuana. And since there is no allegation of entrapment or misidentification, the identity of CI would provide no greater or lesser form of defense for the defendant. *See, e.g., Commonwealth v. Ross, supra,* (the testimony of confidential informant was material to the defendant's entrapment defense and his petition to reveal the informant's identity was proper, where over the period of 5 months the informant persuaded the defendant to sell certain drugs to an undercover officer). *See also, Commonwealth v. Payne,* 66 W.D. 1992, slip op. (Sup.Ct., Dec. 22, 1994) (the defendant was charged with

delivery of cocaine and possession with intent to deliver; where the defense of misidentification was raised, and the informant was the only eyewitness to the crime, the informant's identity must be revealed to the defendant).

Similar reasoning can be applied as to whether the disclosure of the CI's identity is reasonable. The defendant cross-examined the police officers who executed the search warrant and who investigated the CI's information. As previously stated, the defendant told other individuals of his hidden room and any one of them, or any others not known to the defendant, could have told the police officer the information which forms the basis for the affidavit in question. Absent the defendant's need to know his informant, it would be unreasonable to disclose the CI's identity on the mere assertion that to do so would provide the defendant with the necessary information which is material to his defense.

Furthermore, in determining whether the disclosure of the informant is in the interest of justice, the court must weigh the public interest in protecting the flow of information against the defendant's right to prepare his defense. *Commonwealth v. Ross*, 424 Pa.Super. at 576, 623 A.2d at 830, *citing Roviaro v. United States*, 353 U.S. 53, 77 S.Ct. 623, 1 L.Ed.2d 639 (1957). "Whether a proper balance renders nondisclosure erroneous must depend on the particular circumstances of each case, taking into consideration the crime charged, the possible defenses, the possible significance of the informer's testimony and other relevant factors." *Id.* Keeping this consideration into mind, the court notes that disclosing the CI's identity would serve

no rational justice, save for satisfying the defendant's curiosity. Thus, the disclosure of the CI is unwarranted.

Aside from the issue surrounding disclosure, the defendant also attacks the credibility and reliability of the CI. The defendant argues that the search warrant fails to state that the CI has provided information in the past which has implicated other persons in criminal activity, and which specific information has proven to be accurate and correct. In that regard, the defendant singles out paragraph 8 of the affidavit for the search warrant which provides "CI#1 has provided information to this officer in the past that has been proven reliable and will result in the arrests of individuals for violations of the drug laws." (Addenda A, p. 3). The defendant asserts that this constitutes nothing more than a bald allegation that can be used by any affiant at any time, and that nothing is stated by the affiant to indicate what, how or when the informant had provided information to the affiant in the past.

Admittedly, the statement referring to the CI's reliability is wanting in details. In light of the defendant's lack of prior criminal record, something more is needed than the bald allegation found in paragraph 8 of the affidavit. In the case at bar, however, that additional corroboration is provided in the form of an independent investigation conducted by the police officer, and detailed information provided by the CI. First, the CI's information is corroborated by the independent investigation of the police officer, namely the use of the WASP device to detect abnormal heat consistent with the heat source coming from artificial lighting used in the growing of marijuana. "Determination of whether the

information supporting the issuance of a search warrant is sufficiently reliable to establish probable cause often hinges upon whether that information is corroborated." *Commonwealth v. Wilkinson*, __ Pa.Super. __, 647 A.2d 583, 586-587 (1994). *See, e.g., Commonwealth v. South*, 408 Pa.Super. 486, 597 A.2d 137 (1991) (informant's tip, which was corroborated by several months of surveillance by officers, indicated the defendant was selling marijuana from his apartment); *Commonwealth v. Silverman*, 373 Pa.Super. 274, 541 A.2d 9 (1988), *appeal dismissed*, 522 Pa. 510, 564 A.2d 160 (1989) (police officer verifying informant's story by going to the scene of crime to make observation; defendant was known to have prior arrests and conviction for same crimes as reported by informant); *Commonwealth v. Covert*, 322 Pa.Super. 192, 469 A.2d 248 (1983) (information corroborated by police inquiry and surveillance); *Commonwealth v. Prokopchak*, 279 Pa.Super. 284, 420 A.2d 1335 (1980) (information corroborated by police surveillance of defendant's home revealing drug activity). Second, the court cannot overlook the quality of the informant's information, where the CI provided detailed information to the police officer indicating the exact location of the hidden room, the number and description of adult and clone plants which were being cultivated, the time when the defendant was installing his artificial lighting, and an unfailing description of a continuing scheme. Thus, while the "affidavit may not show on its face that the informant is especially credible or reliable, the whole affidavit contains facts consistent with it." *Commonwealth v. Silverman*, 373 Pa.Super. at 281, 541 A.2d at 12 (1988), *quoting*, *Commonwealth v. Gray*, 509 Pa. 476, 485, 503 A.2d 921, 926 (1985). "The information offered to demonstrate

probable cause must be viewed in a common sense, nontechnical, ungrudging and positive manner." *Commonwealth v. Wilkinson*, __ Pa.Super. at __, 647 A.2d at 585, *citing Commonwealth v. Edwards*, 493 Pa. 281, 426 A.2d 550 (1981). Therefore, viewing the affidavit in its entirety, the court notes that the defendant's attack on the CI's credibility and reliability is without merit.

B. THE WASP DEVICE

Previously, the defendant raised a constitutional issue challenging the use of the WASP device under both the Federal and Pennsylvania law. The court has addressed this issue in its Opinion filed on January 27, 1995. Now, the defendant argues that the manner in which it was employed renders the information in the search warrant too unreliable and speculative. In support thereof, the defendant first questions the limitations of the WASP device as a proper surveillance tool. In pointing out the limitations, the defendant states that the device only measures relative heat variations in different surfaces, and it is subject to a great number of variables such as the heat absorption property of an object, the weather conditions and the time of use. The defendant argues that unless the operator is careful in how he uses the device and how he controls the variables, the result obtained will be inherently unreliable. The defendant also attacks the ability of the operator of the WASP device, stating that Captain Davis has limited training in its usage, and that he is unfamiliar with the calibration requirement and does not know when, or if, the device he used was last calibrated. In this regard, the defendant argues that there is no documentation as to what Captain Davis observed in

conjunction with the use of the WASP device. The defendant contends that the lack of documentation makes it impossible for the suppression court to review if the operator followed correct procedure. For the reason stated, the defendant claims that the information gathered from the use of the WASP device was too unreliable and speculative, and any evidence obtained as the result thereof should be suppressed.

As to this argument, the court notes that much of what the defendant claims is unsupported by the record, and what he contends centers around the determination of the witness's credibility, which is within the province of the fact finder. Furthermore, the court notes that these assertions are essentially irrelevant to the probable cause inquiry. At the suppression hearing on February 22, 1995, Officer Pfadt and Captain Davis confirmed what was stated in the search warrant. Captain Davis testified that he is trained in the use of the WASP device, and that he followed all proper procedure on the night in question. In his opinion, the weather was not a factor as the day was generally overcast and the reading was made after sundown. The details of Captain Davis's observation is adequately outlined in the search warrant. The affidavit described who Captain Davis was, the nature of the WASP device and its intended use, what was or was not observed that night, and the conclusion drawn as to what the observation meant. Captain Davis testified that he did not always detect an abnormal reading whenever he directed the WASP device on a targeted surface. However, when he did observe something, he was always correct in his conclusion.

The court notes that the use of the WASP device is relatively new in Pennsylvania. There are no set guidelines

as to what proper procedure must be followed and what, if any, documentation is necessary. However, the court is not without some guidance. For example, in *United States v. Robertson*, 39 F.3d 891 (8th Cir. 1994), a concerned citizen reported to a police officer about a marijuana growing operation. The citizen reported that he had seen approximately 50 marijuana plants at various stage of growth in the defendant's trailer. The citizen described the soil and lighting system being used. The police officer conducted an independent investigation and, with the assistance of a special agent from the Division of Criminal Investigation, employed a thermal detection device at the defendant's trailer. The device showed an abnormal levels of heat escaping from certain parts of the trailer, whereas nearby trailers showed no similar heat variations. The special agent opined that "the abnormal readings . . . would be consistent with a possible indoor marijuana grow, in which a high amount of heat would be caused by the use of grow lights."

In seeking to suppress the evidence, the defendants in *Ford* argued that only cold FLIR readings[3] would corroborate the presence of an indoor marijuana growing operation, and that the FLIR readings did not accurately predict where marijuana plants were later found in the trailer. In denying the motion to suppress the evidence, the appellate court in *Ford* noted the following:

> However, these assertions [relating to cold FLIR readings and their accuracy as to the location of

3. FLIR is another nomenclature denoting a specific model. Essentially, FLIR and WASP are thermal detection devices which measure relative surface temperatures of any given object.

> the marijuana plaints] are essentially irrelevant to the probable cause inquiry. The agents believed that the FLIR readings corroborated the informant's tip, and they reported their conclusions by affidavit to the Meade County magistrate. Numerous cases have noted that high intensity lights are used to grow marijuana indoors and generate excess heat. The agents reasonably concluded that the FLIR readings corroborated the informant's report of wrongdoing in the trailer. That [the defendants] can now advance alternative explanations for aluminum foil on the windows and abnormal emanating heat does not undermine the magistrate's decision to credit the agent's reasonable inferences.

United States v. Ford, 39 F.3d at 894 (footnote omitted).

Similarly, in *Commonwealth v. Johnston*, 515 Pa. 454, 530 A.2d 74 (1987), the police officer employed a narcotics detection dog to sniff for contraband outside the defendant's storage locker in a rental warehouse facility.[4] The *Johnston* court held that under Pennsylvania law, a canine sniff is a search, and that a canine sniff of property must be supported by reasonable suspicion. In addressing the question of whether the information about the dog was properly before the magistrate, the court noted the following:

> The claim that the dog was not adequately identified as a certified scent dog is without merit.

---

4. The use of the thermal detection device to detect the emanation of abnormal heat is often compared to the use of a narcotics detection dog to sniff for contraband. *United States v. Pinson*, 24 F.3d 1056, 1058 (8th Cir. 1994).

> The affidavit contains enough information to inform the magistrate that the animal used was not an ordinary police dog who might "alert" at anything, but instead was trained to indicate the presence of narcotics. To require that the affidavit indicate the school the dog attended and a breakdown of the searches in which the dog has been accurate and inaccurate would impose unreasonable burdens on the police. Unless it is established, as it has not been on this record, that trained narcotics detection dogs are less than 51% accurate, there is no need for a more detailed account of a narcotics detection dog's pedigree.

Commonwealth v. Johnston, 515 Pa. at 471, 530 A.2d at 82.

Against this backdrop, the court notes that "probable cause is based on a finding of the probability, not a *prima facie* showing of criminal activity, and that deference is to be accorded a magistrate's finding of probable cause; and the duty of the reviewing court is simply to ensure that the magistrate had a 'substantial basis for . . . concluding that probable cause existed.' " *Commonwealth v. Wilkinson*, __ Pa.Super. at __, 647 A.2d at 585-586 (citations omitted). Turning to the case at hand, the court notes that the WASP device was used by Officer Pfadt to corroborate the CI's information, and Officer Pfadt reported his conclusions by affidavit to the district justice. The information gathered from the WASP device lead Officer Pfadt to reasonably conclude that the observed reading corroborated the CI's report of an indoor marijuana growing operation. Based upon the CI's information, the officer's 9 years of experience and training as a police officer, and the observations of the WASP device

which corroborated the CI's report, Officer Pfadt concluded that there was sufficient probable cause for the search warrant. The district justice issuing the search warrant agreed with this conclusion, and the court finds no basis to overturn that decision. Thus, while noting some of the inherent limitations of the WASP device, and noting that additional documentation may have been helpful, the court finds that for the purpose of corroborating the CI's report, and for the purpose of finding probable cause, the affidavit contained sufficient information for the issuing magistrate to conclude that probable cause existed to believe that the defendant was engaged in the illegal growing of marijuana, and that related items could be found in the basement area of his residence.

III. *CONCLUSION*

The disclosure of the confidential informant is unwarranted where the defendant merely states that the informant could not exist because the defendant made a genuine, but an unsuccessful, effort to disclose the informant's identity. The disclosure is also unwarranted where the informant is neither an eyewitness to the crime nor necessary for the defense. The informant's tip, which is corroborated by an independent police investigation, strengthens the informant's reliability and credibility. While mindful of some of the limitations of the WASP device, when used to corroborate the confidential informant's report, absent a showing by the defendant that the device was used improperly, the information gathered therefrom may establish the probable cause necessary for a proper search warrant.

WHEREFORE, for the reasons set forth in this Opinion, the defendant's motion to suppress evidence is DENIED.

Appendix C

IN THE COURT OF COMMON PLEAS
OF ERIE COUNTY, PENNSYLVANIA
CRIMINAL DIVISION

No. 1515 of 1994

COMMONWEALTH OF PENNSYLVANIA

v.

GREGORY GINDLESPERGER

ORDER

AND NOW, TO-WIT, this 28th day of April, 1995, upon consideration of defendant's Motion to Suppress Evidence and briefs, and after hearing and testimony, it is hereby **ORDERED** that said motion be and is hereby **DENIED.**

BY THE COURT;

s/ Shad Connelly
Shad Connelly, Judge